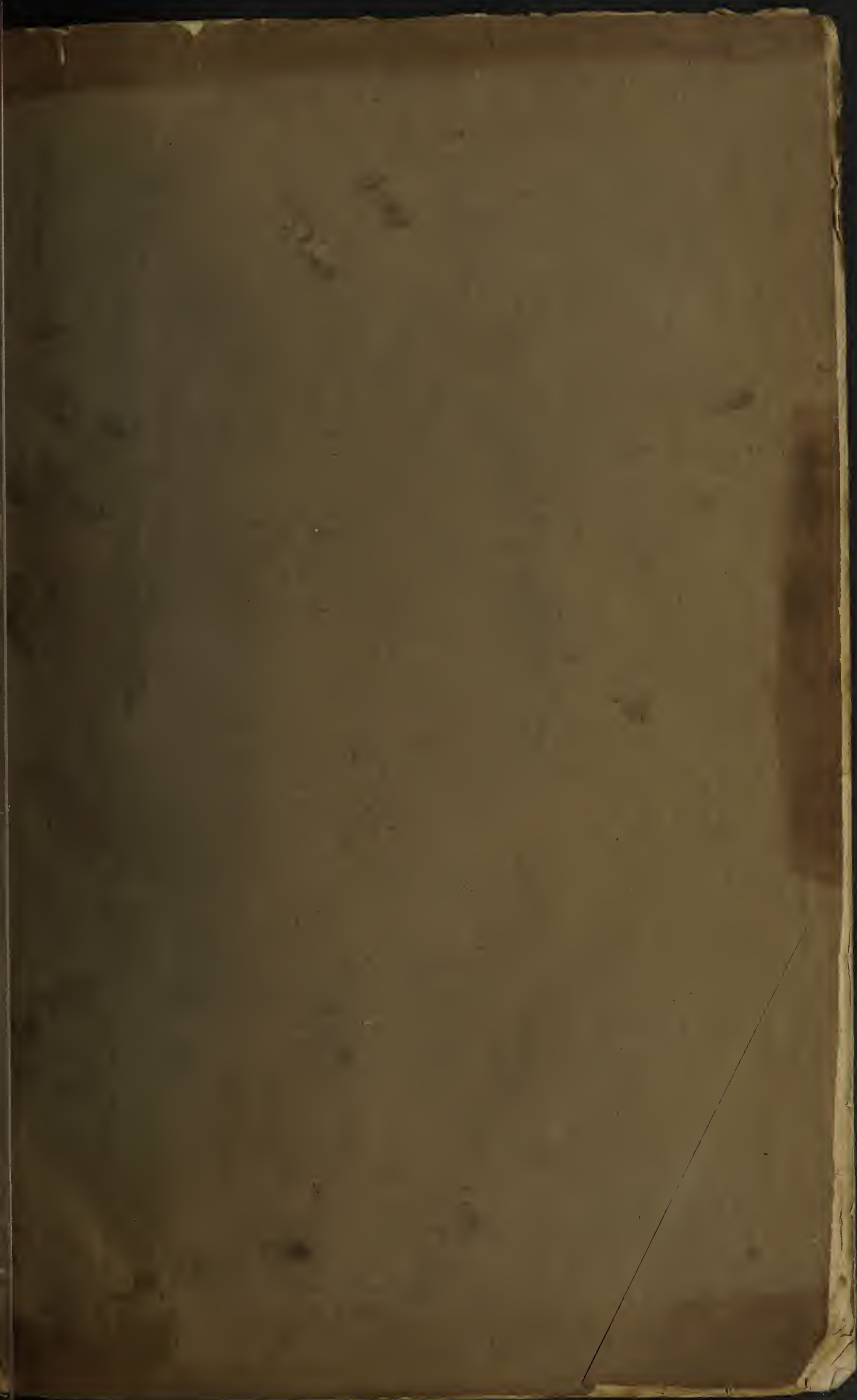




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TWO
TREATISES.
The First of the
VENEREAL POCKS:

Wherein is shewed,

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| <p>I. <i>The Name and Original of this Disease.</i></p> <p>II. <i>Histories thereof.</i></p> <p>III. <i>The Nature thereof.</i></p> <p>IV. <i>Its Causes.</i></p> <p>V. <i>Its Differences.</i></p> | <p>VI. <i>Several sorts of Signs thereof.</i></p> <p>VII. <i>Several waies of the Cure thereof.</i></p> <p>VIII. <i>How to Cure such Diseases, as are wont to accompany the Whores Pocks.</i></p> |
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THE
SECOND TREATISE
OF THE
GOUT.

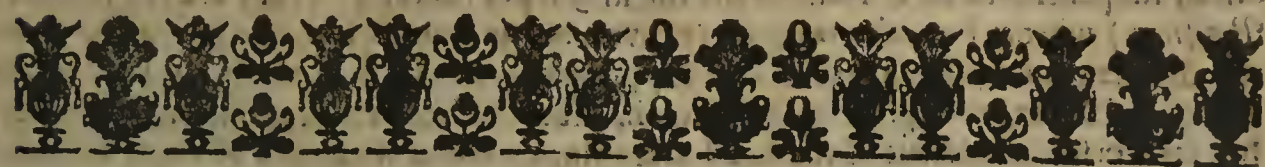
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| <p>1. <i>Of the Nature of the Gout.</i></p> <p>2. <i>Of the Causes thereof.</i></p> <p>3. <i>Of the Signs thereof.</i></p> | <p>4. <i>Of the Cure thereof.</i></p> <p>5. <i>Of the Hip-Gout or Sciatica.</i></p> <p>6. <i>The way to prevent the Gout</i></p> |
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Written in Latin and English.

By { Daniel Sennert^o, Doctor of Physick.
 { Nicholas Culpeper, Physitian and Astrologer.
 { Abdiab Cole, Doctor of Physick, and the Liberal Arts:

L O N D O N:

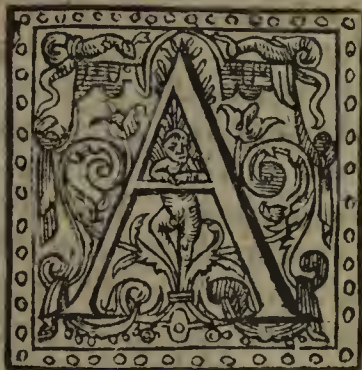
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OF THE FRENCH POX.

CHAP. I.

Of the Name and original of the Veneral Disease.



Amongst contagious diseases, next to the Pestilence, and Leprosy of Arabians, the French Pox doth challenge the first place; but it is called by several names: the most common name is the French Pox, which was therefore imposed, because it first of all in Europe appeared amongst the French. For in the yeare of our Lord 1493. and 1494. When *Charles* the Eighth, King of France, warred with King *Alphonfus* at Naples, this disease first appeared and began to rage in the Camps of the French, and therefore by the *Italians* was first of all named the French

disease. For whereas *Antonius Benivenius de abdit. morb. caus. cap. 1.* relates that it happened in the year of our Lord 1496. that doubtless is thus to be understood, That now this disease did no longer contain it self in Italy, but as he speaks, had almost spread over all Europe, and began to diffuse it self abroad through the rest of its provinces; for all other Authors agree in this, that this disease did first of all appeare at the foresaid time in the French Camp at Naples, and there was called the French disease. But the French that they may remove this disgrace from themselves, and retort the injury upon the Italian, call it the Italian, and Neapolitan disease, because it was first known in Italy at Naples. Others because it was brought by the Spaniards into the French Camp, call it the Spanish disease, and others the Indian, for the writers of the Indies do report that in that part of *America*, whose longitude ends towards the North, and which they call *Florida*, this disease many ages ago was epidemical; and they write that it did generally invade, and suddenly teize on many without any manifest cause, without contagion, and especially if any one had copulation with a woman in the time of her Courses. *Fracastorius* calls it Syphilis, some the gout of the privities, some the great Pox, because pustles and swellings do every where break forth like those of the small Pox. Most men now adays without any injury or disgrace to any Nation, do call it the Veneral disease, because it is chiefly contracted by a contagion from Venery, and lying with unwholsome bodies.

But Authors are wont here to make this Quærie, Whether that disease sprung up at Naples about the yeare 1494. were a new disease, or whether it were known to the Ancients? *Franciscus Vallesius. 1. Epidem. com. 1.* And *Hieron Rusnerus de Scorbuto exercit. 1.* and the some other moderns, are of opinion this disease was unknown to the ancients, and they think that *Hippocrates* did not shadow it out

The Names of the french diseases

The French Disease.
The Italian.
The Neapolitan.
The Spanish.
The Indian.

Syphilis.
Pudenda.

The great Pox.

The Veneral Disease.
Whether it be a new Disease.

out by his pencil, but set it forth to the life in 3 Epid. Sect. 3. (they are the words of *Reusner*) whenas he reckons up there divers symptomes, which are seen in the venereal disease; as imposthumations and suppurations of the flesh, the lying bare of the nerves and bones, and great fallings forth, fluxions collected not like unto matter, but far worse, a baldness of the head and chin, with and without a Feaver, St. Anthones fire with smal Ulcers and inflammation, filthy and putrid fluxes, pains of the limbs, swellings about the jaws, inflammations of the tongue, imposthumations, about the teeth, stammering, corrupt, and perplex speech, enterings into consumptions, burning Feavers, and which is worst of al, ulcers about the pubes and privities.

But *Hippocrates* in that place never so much as dream'd of the Venereal disease, but describes a most grievous pestilence, according to the judgment of *Galen* and al interpreters, and the evidence of the History it self witnessing the same. For that disease for the most part invaded with a Feaver, which is not so in the Venereal disease and was epidemical, whenas the Venereal disease is disseminated only by contagion, and no other way, and the method of curing that disease was far different from the cure of the venereal.

Dodoneus also hath observ'd upon the alleaged place of *Benivenius*, that a long time agoe some men have contracted some hurts from uncleane and filthy women, as *Guilielmus Salicetus*, *Gordonius*, and *Vallescus de Taranta*, do testify, the last of which lived in the year 1418. but *Salicetus* flourisht in the year 1270. *Gordonius* in the time between them both. Nay holy writ doth testefy that he that followeth harlots, shal have wormes and moths for his reward: but I do not think that those diseases were the same with the Venereal disease of this time which first of al appeared at the afore said time in Italy in the Camp of the French. Therefore though *Paracelsus*, lib. de tumorib. et ulcer. morb. Gal. cap. 3. Writes that this hapned in the year 1478. and lib. 1. de causalibus Gal. cap. 3. In the year 1480. yet he differs from the relations of al others, since al agree in this, that this disease was not known in Europe, before the year of our Lord 1493. although it were endemious in the west Indies a long while before, and was brought by the Spaniards out of India into Italy. For when *Christopher Columbus* in the year 1492. in the month of September undertook his first voyage into the west Indies, and spent almost two years in that expedition, he returned into Spain in the year 1494. whose Souldiers being infected with that disease in India, and afterwards serving in the Italian expedition, did sow amongst them this disease. For as *Gabriel Fallopius* writes of this business de morb. Gal. lib. 1. (Who reports his Father was in that warre) whenas the Spaniards by reason of the deareness of provisin did drive out the unserviceable multitude, the French did privately entertain their harlots, being allured by their beauty, and so infected with their contagion contracted this disease, which afterwards was first of al spread through their camps, & hence throughout Europe.

Yet in some Countries it hath and doth yet spread more frequently, in others 'tis more rare, to enquire into the cause whereof, it being a thing hateful we shal forbear; yet this I think is certain, that there are fewer sick of this disease in Germany, than in some other Countries. *Gabriel Fallopius* makes mention de morb. Gal. cap. 76. Of *Jacob Carpus*, who was the first almost that used the way of cure by unction of Quicksilver, who by this cure alone grew so rich, that he left besides Silver, 40000. Golden * Scutatoes. And *Capivaccius* reports in tractat. de lue Vener. cap. 12. In fine, that he hath gotten by the cure of the French Pox only above 18000 Crowns of Gold. And *L. Septal.* l. 7. animad: n. 186. writes that at Millaine in *Brolins Hospital*, there is oftentimes cured seventy in the spring only, and at other seasons alwaies two hundred. But I confesse ingeniously, that within these 34 yeares which I have practised at Witeberge, and by Gods blessing I do it not without profit, that I have not gained by the cure of this disease so many crowns,

Crownes, as *Capivaccius* hath got thousands of them, by reason of the fewness of them that are sick of this disease in this place.

Yet others differ concerning its original, and think that this disease was not only disseminated by contagion from the Spaniards, but think it was contracted by the fault of the Ayr, as epidemick diseases are; when as many every where in diverse countries began to be sick of this disease without any contagion; of which hereafter.

Chap. I I.

A History of the Venereal Disease.

BUT concerning the original of this disease we shall speak more hereafter when we shall treat of its causes: now let us enquire into its nature, which that it may succeed more happily, and that it may appeare, where lyes the controversy; I will first propound its description and history out of credible Authors which then lived especially *Hieron Fracastorius*, and *Anton. Benivenius*. When this disease was first made known, there rose pustles of divers kinds in the genital parts, sometimes also the head, principally in the hairy part, sometimes also the forehead, neck, breast, duggs, armes, and other parts, and from thence did spread over the whole body; in some indeed they were flat and low, but rough on their surface, when the scales were fallen off, of a color somewhat red, and the flesh under them appeared callous; in others they were like to warts, of a round figure, which grew to the magnitude of an acorn cuppe whose figure also they resembled, and from these the lighter scales falling off did hang forth a more ruddy flesh, from wch did flow forth a virulent ichor and of a strong smel; but some were taken with larger pustles, which did not swell above the skin, which had thicker scales, from which also did flow a more plentiful virulent matter, and the scales being cast, the flesh appeared more dark and somewhat livid. Some having white scales taken off, there remained somewhat like unto a skar, from which blood sometimes flowing, did shew the difficulty of the cure, and it represented the likeness of a dry scabb, a disease worse than all the rest. For though it did corrode less, yet for spreading it was worse than the rest, and was diffused into divers places. Besides those external pustles there did rise others in internal places, as in the mouth, jawes, nose, and the obscene parts, which turned to malignant and creeping ulcers which eat away the parts under them, and in some eat up the Nose, in others the lipps, in others consumed the Uvula, and perforated the palate, which caused their voice to be hoarse; neither did this evil spare the bones, but caused rottenness in them, whence some had their skul, others other bones full of holes. Neither did those pustles and signs of the disease appear only in the external parts obvious to the eye, but it was observed in some, that those pustles & filthy ulcers had possesse their very bowels. They that had this evil about their upper parts, had vitious distillations, which did sometimes eat their palate, sometimes the jaws and tonsills, in some their nose, and in others their eyes. Furthermore for the most part certain gummosities grew on their limbs in great deformity. For oftentimes they were prominent the bigness of an egg, oftentimes the size of a Loafe, which being opened, there appeared a white mucilaginous mucous: that tenacious callus, happened most of all in the Arms and Thighs, in some it was exulcerated, sometimes it continued whole until their death. There came also cruel pains with exceeding torment, which were exasperated towards night: but those pains did shew themselves about that part of the bones where is no flesh in the Leggs, shoulder-blade, about the collar-bone, in the shoulders, head, about the forehead and temples, sometimes also in the breast bone, but not in the very joints, but about the muscles and nerves. In which case notwithstanding there was great variety. For some had pains without pustles, some pustles without pain, the greatest part was affected with both, and truly those pains sometimes went before the pustles,

sometimes followed, and sometimes rose together with them: in the interimal parts languished, the body pined away, the appetite was dejected, watchings, sadness, and continual anger, and desire of repose posselt them; sometimes a small Feavor accompanied them, but seldome: their blood, if a Vein were opened, was mucous, and corrupt, their urine thick, fat, and somewhat red without a Feavor, they went hardly to stool, and the excrements were mucous and dry. The shedding of the Hair is frequent in this Disease, especially in the Head, about the Temples, and the hinder part, also of the eyebrows, and of the Beard in men; oftentimes also Buboës break forth in the groin, therefore called Veneral and Gallical, which sometimes vanish again, sometimes grow hard, sometimes suppurate; there rise also in the privities of Women knobs, and in men in their Arse-hole, besides sometimes there happen chops and clefts in the hands and feet, and the thick Skin in the palme of the hands departs from the skin under it; sometimes also the nails fall off: At last there happens sometimes, that in men a virulent matter flows through their yard, in women through their privities, which flux of virulent matter is commonly called the Gallical or virulent running of the reins, although indeed it is not seed, by which flux of the yard, the inward passage is exulcerated, and certain caruncles do grow in the urinary passage, whence they pisse hot, and there is caused a dropping of the urine with pain. And this was the face of that disease at its first rise, which as Hieron Fracastorius relates, since that time seems to be altered. For almost twenty yeares after its original there began to appear fewer pustles, but more gumosities, and the pustles became dryer, and the paines more cruel. Six yeares after again there was another change, for now there were very few pustles seen, and almost no paines, or much gentler, but many gumosities, and which seemed wonderful in all; the shedding of the haire made men almost ridiculous, some appearing without beard, some without hair on their eyebrows, others with bald pates, from which change Fracastorius had good hopes, and did think that the old age of this disease was now entring, and that ere long it would come to pass, that it could not propagate it self by contagion, because the matter grew dayly thicker, in which both fewer, and weaker seminaries are produced: but his hopes did much deceive him, and this disease last even in these times, nay as some think, 'tis well nigh worse than it was of old.

CHAP. III.

Of the Nature of the Veneral Disease.

The Veneral disease, is from an occult quality.

Since then so great a Hodge-podge of diseases and Symptoms appear in this affect, we must diligently enquire what the nature of it is, of which divers Authors have their divers opinions, and as Epiphanius Ferdinandus writes of this business, in *Hist. Med. Hist.* 17. the Authors which have writ of this Disease, although they amount to the number of eighty (and perhaps more) are all almost differing concerning the Essence of this Disease, and every one defines it at his own pleasure; for whereas this Disease was unknown to the Ancients, nor described by them, nor they had not, as is usually wont to be, the opinions of the Ancients to insist upon, every Modern using his own liberty hath proposed his own Opinion. Truly I think this is not doubted, that 'tis a Contagious, Malignant and Venenate Affect; neither doth it seem to want any great pains to prove it, for it appears sufficiently by this, that in so small a quantity of matter, by which this Disease is contracted by contagion, there is so great force and power of action, as no first quality, or the temperament made up of the first qualities can have; and the variety of Diseases and Symptomes in this evill is so great, that it cannot be reduced to any manifest cause; therefore as in pestilent constitutions, such as that Attick one was in *Thucydides*, and that which *Hippocrates* hath described, 3. *Epid.* there was so great a multitude of evils, that they were forced to fly to occult qualities and a venenate cause; so also, there being so great a filth of diseases and symptomes in the Venerous Disease,

Disease, that the original of them all cannot be refer'd to any manifest quality; here also we fly to a malignant and occult quality.

But although these things be thus, yet Authors differ stil of this, whether that malignity consist only in the cause; or whether there be also some malignant Disease present. *Capivaccius, de Morb. Gal. Cap. 1.* thinks this affect not to be the Disease, but the cause, while he defines the Veneral Disease, that it is an excrement wholly preternatural, able to hurt man many waies; produced out of humane substance by its like. *What it is. Capivaccius opinion*

Thus also *Hercules Saxonia, de lue Vener. Cap. 1.* writes, that the Veneral Disease is the Cause, not the Disease nor the Symptome, therefore, because it can exist out of mans body in Linnen, or other such kind of vertues, besides in the sweat, Seed, and Blood, being seperated from the body; but within mans Body it infects and possesses also those parts which are not living, and are not subject to Diseases, viz. the humors and spirits. *Hercules Saxony.*

Aurelius Minadous de virulentia Vener. holds that 'tis neither the disease, nor the cause, nor the symptom; nor the disease for this cause *cap. 17.* because 'tis neither a distemper, nor evil Composition, nor a solution of unity: but he denies it to be the cause of the Disease, *Cap. 9.* since that is properly the preternatural; the cause between which and the Action there falls a medium, viz. the disease whenas the disease is that which doth next of al hurt the Action, but the cause doth hurt it by intervention of the Disease; but between the Veneral virulency and the action hurt he thinks there falls no medium, but that of it self by its own strength doth primarily and immediately viciate and hurt the operations; but that the Veneral virulency doth of it self and primarily hurt the operations, he thinks this is confest amongst Physicians, and therefore deems it to be presupposed, and unless this virulency did of it self and primarily hurt the operations, so many Physicians would not have labored in searching out its nature. He proves it is no Symptome, *Cap. 18.* because it is no action hurt, nor quality changed, nor excrement altered. That it is no action hurt, he proves by this, because the veneral virulency it self is that which hurts the actions; neither is it any quality changed, because the qualities changed do follow the actions hurt, and besides so many diseases are seen in this virulency which are not Symptoms. But *Aurelius Minadous* himself, when he had rejected al the opinions & definitions of others, at length he fits himself to make a perfect definition and to explain the nature of this evil. But first of al *Chap. 16.* he presupposes this as the ground of his opinion, viz. that the French Disease ought not to be defined by a quality, but rather by the name of a body, for this reason, because it passeth from one body to another, which is the propriety of bodies not of qualities, and because it toucheth other bodies, for none but bodies can touch, and be toucht again, as *Lucretius* hath it. Again, if it were a quality, it were either manifest, or occult, no manifest one, as he proves rightly by many Arguments; but that it is no occult quality he brings no special Argument, but repeats the general one, because 'tis moved from place to place, and toucheth other bodies. *Aurelius Minadous.*

This presupposed, afterwards *Chap. 30.* he affirms the Veneral virulency to be somewhat corporeal internal, and truly a spirit or a vapor, for this reason, because 'tis carried, communicated, and participated in a very short space of time. Yet he holds it to be such a vapor which is endewed with an occult quality and vertue from its whol substance, or the whol mode of its nature, by reason of which quality it cannot only infect any humors of the body, but also al parts of the body, and corrupt them & turn them to its own likeness: but that this evil consists in a spiritual substance, he further proves, because some are infected not only by the act of Venery, but also by a Kiss, or the use of garments: next of al, because some have felt no other hurt from this evil, than only the falling of their hair, because the roots of the hairs were gnawed off by the acrid vapors. Thirdly, because some only by vehement exercise have discussed this virulency. Yet he denies that vapor or spirit to be properly an excrement, *Chap. 20.* whenas that is properly an excrement, which redounds from nourishment, & which is cast off from another: although he grants there that

that is commonly called an excrement, whatsoever is superfluous in the body, whether it be a spirit, or humor, or some other solid body, whether it be usual, or unusual, whether according to nature or preternatural; furthermore he holds this vapor to be wandring, thin, and viscid, Chap. 21. and to be raised from a spirituous, humorous, solid substance: but he proves Chap. 22. by many Arguments that this vapor is contrary and preternatural by its whole substance, of which we shal speak hereafter; and at last Chap. 27. he defines the Veneral virulency, that it is a vapor by its whole substance inimicus to the natural faculty, working by degrees. And that he might unfold his mind more clearly, and not leave the Reader doubtful, to what kind of things preternatural this virulency ought to be referred, whenas he had said before, that it was neither the Disease, nor the cause, nor the Symptome, yet it primarily hurt the actions; at length Chap. 28. he holds that 'tis an externall error, and he endeavors to prove it by this Sylogisme, whatsoever doth primarily hurt the operation, and is not of the constitution of the body, is an external error, but the Veneral virulency doth primarily hurt the operation, and is not of the constitution of the body, therefore 'tis an external error.

Some that they may briefly quit themselves, and hold with al men, say that this disease is a heap of al evils, Diseases and symptomes.

The Veneral disease depends on an occult quality.

That we may clear ourselves out of this difficult controversy, first of al 'tis already proved, and shal be proved more at large hereafter, that they are in the right, who do here admit of an occult quality, and a power depending on the whole substance, as they commonly speak; neither can they hold any other waies, Since 'tis without doubt, that 'tis a contagious and malignant disease while it is such. It performs two things, to wit, it alters the body by which it is received and changes it to its owne similitude, and indeed it alters it not by the first qualities: as shal be said by and by, since it is not expeld by the first qualities; neither is that change alwaies with putrefaction, whenas putrefaction is not induced but by a long time, but this change is made in a moment as it were; neither is it an adustion, as *John Baptista Montanus*, and some others do hold, whenas there is not alwaies a hot & dry distemper present, neither is it cured by cooling and moistening things, and oftentimes there is a fordid putrefaction, in which there is no exustion.

'Tis a disease.

But whereas they hold this malignity is only in that matter seated without the living parts, and that there is no such disease present, in this they erre very much. Indeed we willingly grant, that that contagious inquinatio, sent forth from the body infected with the veneral disease, may adhere to the garments; neither do we deny this, that the humors in our body may be tainted with the same, yet in the interim it doth scarce follow, that the living parts remain free and sound; for as in a putrid fever, though the humors and spirits do first grow hot by the feaverish heat, yet afterwards the living parts are seized on by the same distemper, so though the humors in the Veneral disease are first infected by that occult malignity, yet there is no cause why the same fault may not be communicated to the living parts.

Not hot and dry.

But though some do acknowledg that this cause cannot be idle, yet whenas they know nothing beyond the manifest and first qualities, they endeavour to reduce also the effects of the veneral virulency to manifest causes. *John Baptista Montanus* as was said even now, thinks the essence of this evil consists in a hot and dry distemper, but the cure tels otherwise, whenas 'tis cured by hot and dry Medicines, as by the Decoction of *Gnajakum* and the like: besides, because there is a great putrefaction in the Humors, which doth not proceed from a hot and dry distemper.

Not cold and dry.

Nicolaus Massa de Morb. Galli. Cap. 5. saith it is a coldness of the Liver, declining to a little driness with an occult quality: but as concerning the occult quality he writes truly, but that it is no cold distemper, the effect doth teach us, as the Ulcers, rottenness of the bones, and the like; and what other distemper soever they alleage. Yet they produce nothing agreeable to the Diseases and Symptomes,

Symptomes, which appear in this Disease, nor to the Cure.

Therefore when as the action of the veneral virulency can be referred to no manifest quality. We may well say that by that is induced an occult quality: For first of all every efficient cause is said to be a cause from the nature of its efficiency, and therefore this malignant quality doth not only alter and change the humors, but also the living parts into its likeness: again, though the morbid cause be taken away, and this disease seem now to be overcome, yet unless that malignant disposition be destroyed the man recovers not his perfect health. For it hath been observed that the Veneral Disease hath sometimes grown fresh after thirty years past, which doubtless happened not because the Vicious Humors lay so long hid in the body (for these would have sooner discovered themselves by their signs) but because that malignant disposition imprest on the body was actually there, which afterwards, by degrees produced vicious humors, and corrupted, and so broke forth into act; and *Trincavellius*, Lib. 11. *de curand. rat. particul. affect. cap. 11.* reports, that a certain Woman brought forth a Child sick of the French Disease, and every where full of crusty Ulcers, whenas she herself never had any sign of that Disease contracted, but was alwaies wholly well, and on the contrary it may happen, that one may have a French Ulcer, which yet, when that Malignity is destroyed, is no longer rightly said to be Gallical, but is cured by vulgar Medicines as other Ulcers.

Al which being thus, we conceive the the Veneral Disease, doth not only exist in the Humors, but also in the living parts, and that it doth consist not only in the change of the first qualities, but also there is an occult malignant quality imprinted on the parts, and therefore the veneral Disease is to be referred to diseases, and those of occult qualities. Which are called by *Fernelius* diseases of the whole substance, but not on every part rightly explained, as we have said before, the which if *Capivaccius*, and *Saxonia* had known, the one would not have defined this evil by the excrement, nor the other by the cause. if the same also had been known to *Aurelius Minadous*, he would not have endeavoured to maintain that this evil was no Disease, but an external error. For whereas he endeavors to prove that the veneral Disease is not a Disease of the similar parts, because it is not a distemper, nor an evil composition, nor a solution of unity, in this proof he labors to no purpose, for al this we willingly grant; but this he ought to prove, that there is no other kind of Disease in the similar parts besides the distemper of the first qualities; but that there are such diseases, which *Fernelius* calls of the whole substance, we more rightly, of occult qualities, is sufficiently proved above, *part 1.* and this very Disease, as all other venenate Diseases do shew, that it can be referred to no other kind than to malignant qualities; & this follows from *Minadous* his own supposition, and confession, which he hath *Cap. 20.* where he writes, that the Veneral virulency hath power not only to infect all Humors, but all parts of the body, and to corrupt and convert them to its own similitude. The same *Minadous* if he had known these Diseases, had not taken so much pains, to what kind of preternatural things the veneral virulency ought to be referred. For first of all there was no need of excluding from the number of causes, those vicious Humors, which are found in the bodies sick of the veneral Disease, and have power to alter and change the Humors themselves and parts of the body. For whereas he saith, that is properly the cause, between which and the action hurt the disease doth interceed, that is true of the next cause, but the antecedent causes also may do hurt, as they have the Nature of a vicious object, and external Error: and in this very Disease whiles the virulent Humors do imprint a malignant quality on the parts, between them and the action hurt that Malignant disposition and occult quality doth intercede. Therefore whereas he thinks that Humor or venenate vapour in the veneral disease, doth immediately hurt the action, 'tis false, unless that humor have the nature of an external error. For all hurt actions in the Veneral disease do happen, whiles between them and the humor, or malignant

An examination of Aurelius Minadous opinion.

vapor,

vapor, a midling disease doth intercede, to wit, that of occult qualities.
The Venereal disease is not a Body. But whereas he denies the Veneral virulency to be a quality, and holds it to be a body, first of al he confounds the cause and the disease, next of al he doth not distinguish between the quality and its subject. For whiles we say the Veneral evil, we understand either the disease it self, or its cause: if the disease, that is a quality, as al diseases are, to wit a preternatural disposition of the parts, and indeed an occult and malignant quality: but if the veneral evil be taken for the cause, either without, being communicated doth induce this disease; or which is in the body, which raiseth divers diseases and symptoms, and can infect others, we grant that cause may be called a body. But we must take notice, that those humors or vapors are not said to be causes, as they are bodies, but as they have an occult and malignant quality, which *Minadows* himself cannot deny, while *Cap. 20.* he writes, That that vapor or spirit, which he calls the veneral virulency, is endowed with an occult quality and vertue, depending on its whole substance, by which it is able not only to infect any humors of the body, but al its parts, and to corrupt and convert them to its own similitude. For what similitude is that I pray, to which the Veneral virulency converts not only the humors, but also the parts of the body, unless it be that occult quality with which that vapor is endowed?

Whether it be a Vapor or a spirit.

Whereas last of al, *Cap. 38.* he refers the Veneral virulency to external error, because it primarily hurts the operation, and is not of the constitution of the body. But before denied it to be either the disease, or cause of the disease, or symptom, in vain doth he multiply things, preternatural; for there are not more preternatural things, than the disease, cause, and symptom; and the Veneral virulency, as he describes it, doth wholly belong to the causes two manner of waies, for either it induceth the like disposition into the parts of the body, or it raiseth other diseases while it eats and exulcerates the parts. But whenas he saith the Veneral disease taken for the cause, is a vapor or a spirit, that is rightly to be understood; for indeed it can no way be denied, that it is a humor also, whenas in copulation 'tis rubbed against the body, and sticks in the cloaths: yet such is its nature, as 'tis also of other contagious humors; that though it be resolved into vapors and the least bodies, yet every one of them contains its whole essence, and hath power to affect others: and this thing may be declared by musk, castor, and the like. For those things, though they be bodies, and humorous too, yet are such, that though they be resolved into the least bodies, nevertheless they retain their full strength. After the same manner it is in the Veneral disease, and other contagious diseases, in which though the malignant and contagious humor, be resolved into the least bodies, yet every one of them obtains the same essence, and vertue, and power to infect others. But whereas he thinks that humor and vapor is not to be called the cause, but an external error, in that also he is mistaken: for an external error belongs unto the causes, from whence the Symptoms arising from an external error, are called the symptoms of the cause; where this also is to be observed, that Physicians do not vouchsafe the name of the cause to the next cause only, but also to the antecedent, which do not yet effect the disease: therefore there is bad nourishment by reason of vitious humors, although they have not yet imprinted a distemper, and vitious disposition on the parts: but whereas he denies the Veneral virulency, considered as a vapor to be the cause, because it hurts the actions not by the mediation of a disease, but next of al, and immediately, he presupposeth that which is not yet granted, and so begs the question: for this spirit or vapor hurts the very constitution of the similar part, and imprinteth on it a malignant quality; the which he himself cannot deny, whiles *Cap. 23.* he holds, that by this disease of venery many actions are hurt, but not al in al people; but the hurt of the natural faculty is common to al, and that there is none, that is posselt with this disease who is not troubled with some fault in his natural actions, and hence proceeds al that filth of excrements, and the gummosities arising from thence, tumors, pustles, by

pains, running of the reins, ulcers, rottenness, and such like evils; and that the Veneral virulency hath a peculiar enmity, and discord with the natural faculty, and is inimicous to it by its whol kind, that is, by its form, by its specifick faculty, by its whole substance, and occult propriety: but he further describes the enmity against the natural faculty, that it is by its nature destructive to the natural spirit, that the Veneral virulency hath unspeakable qualities, hindering the generation of the natural spirits, and those not manifest, but occult. But whenas there is required to a natural action, the soul, the temperament, and the innate heat, or the implanted spirit, and the influent heat, he further concludes rightly, that the soul is not hurt, as that which can no waies suffer, nor the manifest temperament, as was proved hitherto, but chiefly the implanted spirit or the innate heat: al which whenas they are so rightly spoke, and the Veneral virulency is an enemy to the implanted spirit, and truely not by manifest qualities, but by its form, by its specifick faculty, by an occult propriety, by which it indeavours to change not only the humors, but also the living parts, and the implanted heat in them into its own similitude, certainly the like malignant quality, is induced into the parts: which vicious & malignant quality, what other thing I pray is it, than an occult & malignant disease?

Al which being thus, we rightly conclude, the Veneral evil is an occult and venenate disease; for it is induced by causes of that kind, and immediately exerciseth such effects which cannot be referred to any manifest distemper; but onely to an occult quality; neither is it cured by medicines that work by manifest qualities, & correct known distempers, but by proper and specificks, which al Physicians at this day, and especially those who lived at the beginning of this disease have testified, and to their own and patients damage have found it true. For when they followed the common way of cure, and could do no good for the cure of this disease, they began to be despised by many, til the Spanish Physicians shewed them medicaments brought out of the *Indies*, and bold Chyrurgeons ventured upon Quick-Silver.

The Veneral evil is an occult & venenate Disease.

But that al this may be made clearer, we must enquire what is the subject to this disease, concerning which physicians do differ. Some have thought the privities are first infected: for by these parts for the most part, this evil is contracted by impure copulation, and the footsteps of this disease, unless it be perfectly cured, do chiefly appear about the privities; the nut is easily excoriated in venery, the flesh oftentimes remains callous for a long time, with a running of the reins, and breaking forth of buboes in the groin. But though it cannot be denied, that oftentimes the original of this evil is from the privities, and doth chiefly discover it self in that place. Yet that doth not happen alwaies, but the same disease may be contracted by kissing, sweat, embraces, vestures, nay infants also may be infected by the milk they suck from their nurse, & they that are infected after this manner, have not this disease appearing in their privities.

What is the subject of the Veneral Disease.

Not the Privities.

Some, as *Leonicens* do hold, say that the skin is the subject of this evil, as in the scab, tetter, and the like affects: but the skin alone is not alwaies affected, but other parts also, the privities, the jawes, the bones which become rotten, nay sometimes also the internal parts. *Hercules Saxonia de lue Vener. Cap. 3.* maintains a threefold subject; one in the beginning; another in the middle; another in the disease confirmed: in the beginning he holds that the natural spirit is affected or the vaporous part of the mass of blood, then the juyces and excrementitious humors, at last the alimentary humors, but in process of the disease, adust humors; and the parts affected are the stomach & liver, & thence chylickation & sangification are hurt; but when the evil is old, flegmatick humors are the subject of it, & the parts affected are simelar, bones, nerves, membranous bodies: but we willingly grant, that as the disease is new, or old, so and also sometimes more, sometimes fewer parts are possest and corrupted; as we deny not this neither, that the excrementitious humors are easier corrupted than the alimentary, whenas nature doth alwaies more defend the profitable humors, than the excrementitious, into which without any difference this evil doth easily almost diffuse it self, but indeed the question is not here, what may be infected by that virulency; but this is the Querie, what is the subject of this disease, which we have

Not the skin.

demonstrated to be; for as in putrid feavers the spirits and humors wax hot, yet are not the subject of the feaver; so also though a malignant quality from the Veneral virulency be imprinted on the humors; yet they are not the subject of the disease, but only the living parts; and which of them is the subject of this disease is the question: and whiles that he sometimes holds the Liver and stomach, sometimes the similar parts to be the subject of this disease, in that he is wavering, for whether the disease be new or old, the subject is the same.

Not the
Spermatical
parts.

Whether
the liver.

Whether
all the parts.

There were some others also, who held those parts we call spermatical, the nervous and membranous, were the subject of this disease; but not only the membranous and nervous parts, but also the fleshy parts are affected in this disease.

Others hold the Liver to be the chief subject of this disease, and this opinion is most consonant to truth, but when as many other parts are affected, 'tis conveniently to be explained, as shall be said by and by.

Aurelius Minadous de virul. Vener. Cap. 34. first of all presupposeth this, that there is no peculiar member in our body, which is alwaies affected in the Veneral virulency, which is true in its way, whiles sometimes this, sometimes that part is affected; next of all he holds that this virulency is chiefly an adversary to the natural actions, or rather to their faculties, which natural power when as it is in all parts the veneral virulency is not an enemy to one part in speice, but to all, in which that power is. In the third place he adds this, That that natural vertue implanted in the natural parts, doth performe its operations without any influx, and that there is no natural faculty influent, as there is an animal influent; secondly he confutes them in particular, who hold the Liver to be the first and perpetual subject of this disease, for it may come to pass saith he that one after an impure copulation may presently suffer an exulceration in his privities, whom certainly no body wil deny to be infected with the Veneral disease, when as yet in him the Liver is not affected: and the same reason is for other parts, which are first affected by contagion; nay he holds, that one external part being infected, the humors in the body may be infected without any hurt of the Liver. In the interim he cannot deny this, that this evil doth most properly and chiefly appear, when the Liver is affected, when as the operations of the Liver are necessary to the whole body. The same Author *Cap. 4.* endeavors to prove, that the Liver is not the subject of the Veneral disease, when as the face saith he is the index and truest glass of the internal affects of the body, yet especially the affects of the Liver doe appear in it; therefore if the Liver were perpetually affected in the Veneral disease, also the color of the face should alwaies appeare vitious, the which we have found false by experience; for we have teen both men and women infected with this disease, who notwithstanding have had a fresh color in their face, and the evil hath been in their privities: again he thinks, that by carnal copulation the privities may first of all be affected, and from thence the evil may creep through the veins, and by the spirits, to the other parts of the body, and as one part is more apt and disposed than another to receive the infection, so sometimes this, sometimes that is infected, but not alwaies the Liver.

The Au-
thors opini-
on.

That we may cleare our selves of this controversy, first of all we must enquire from the actions hurt what part is affected, and what faculty is oppressed; but though divers actions hurt that part in the veneral disease, yet all of them cannot bring us to the knowledg of the first and proper subject. It happens indeed sometimes, that there are pains felt in the head about the muscles and bones, but that is not alwaies. Sometimes also the hurt happens in the external and internal senses, but this also is seldom: sometimes putrid vapors are inflamed, and hence a Feaver is raised, which some call a French Feaver, but this also happens seldom. In like manner 'tis in other diseases and symptoms. One action is hurt which is common to all that are sick of the veneral disease, viz. nutrition is corrupted; hence we see that in those who are possessed with this disease, the color of their body is changed and furred, and sometimes turns black, sometimes of a lead color, sometimes livid. There arise every where in their body divers kinds of swellings and bunchings out, also ulcers, the bones rotten, the hairs fall off, all which proceed from corrupt nutrition. From which we conclude that the

the venereal disease is primarily an enemy to the natural faculty: but 'tis no wonder that this poyson is only an enemy to the natural faculty, whenas there are other poysons, which are inimicous to other faculties: thus the poyson of the pestilence is an enemy and many others are enemies to the heart, cantharides to the bladder, mad nightshade and opium to the animal faculty.

Whence that we may briefly conclude the business, this evil indeed may be contracted by one member, yet if it be spread into more from that one, that comes to pass because the Liver is infected: yet because this poyson hath principally an enmity with the natural faculty, and the fountaine of that, or chiefe seat is the Liver; that also is primarily infected with this virulency, and through that the rest of the parts contract this evil. Therefore whereas *Minadous* objecteth, the color of the face is sometimes fresh, therefore the evil is not yet communicated to the Liver, but still sticks in the privities which were first of all infected, and the force of this virulency is sometimes greater, sometimes less; from whence also 'tis sometimes sooner, sometimes later communicated to the Liver. Besides, this evil consists not in the first qualities, but in occult, whence 'tis no wonder, that that malignity may consist in the blood, which to the appearance is good; but all those things will be yet made clearer by the discovery of the causes.

Chap. IV.

Of the Causes.

BUT concerning the causes of this disease, two things are to be explained, the first is how at this day the Venereal disease is contracted; the other is, what was its original when it first appeared. At this day indeed I think this evil is no otherwise contracted, than by contagion, and that 'tis manifest that every Venereal pox is not contagious. *Hercules Saxonia, lib. de lue Vener. cap. 3.* Holds that every Venereal pox is not contagious, and that which is old and confirmed is for the most part less contagious, than that which is new, and of a middle age, and that which discovers it self by knobs, is not contagious; and he endeavors to prove it, first of all by reason, because the contagion is placed in a hot and movable excrement, but when nothing breaths forth from the part affected, which can be communicated to another, the disease then is not contagious, and therefore because in the knobs there is no such excrement contained, or if it be contained, it is not carried to the genitals, therefore that disease shall not be contagious; next of all by experience, for he writes that a certain noble man of *Padua*, who had used Guajacum almost twenty times, and was thrice anointed with quicksilver, yet could never be cured, and though he lay with Virgins yet he never infected them: and out of *Antonius Musa* he relates of one, who had a wife possessed with the Venereal disease about her breast, yet he never contracted the disease.

The Venereal disease is contracted only by contagion. Whether it be alwaies contagious?

But here we cannot assent to *Saxonia*, but we hold that every Venereal disease is in its manner contagious; but whereas he objects against us experience, it doth not follow, that if one sick of the Venereal disease doth not actually infect another; that the disease it self is not contagious; for that an effect may follow, there is necessary both an agent, and a disposition required in the patient. Hence we see that many do converse with those sick of the Plague, and are not infected, yet we must not conclude from thence, that that Plague was not contagious: & *Gabriel Fallopius de morb. Galli. Cap. 22.* makes mention of twelve Schollars, that had to do with one whore, yet of all them, three only were infected. And *Saxonia* himself affords an answer to this argument, while he writes, That this disease is not contagious if nothing breath forth from the part affected, which may be communicated to another, the which may happen in the knobs and callosities; or if any thing do breath forth, and be not received by another. Therefore though

one have an ulcer in his head, or a knob in his thigh, but the Genital parts be sound, 'tis not necessary he infect her he lyes with. But whereas he teacheth that the inveterate Veneral disease is less contagious, than the new, or middle aged it may in its manner be granted; and from that very thing we may collect, that the Veneral disease is not only the cause, but also the disease. For when as this disease is communicated by the cause or contagion, it may come to pass, that the cause may be for the most part taken away, which doubtless happned in him who so often used the decoction of Guajacum, and was thrice anointed; and such men indeed, if the disease be stil upon them, but the corrupt humors being for the most part emptied by sweaters and unctions, they are not so contagious, as those, who were lately infected with this out of whom those malignant humors have not yet been emptied.

Therefore we conclude, though for certaine reasons, those who are sick of this disease do not alwaies infect others; yet at this day there is no man taken with this evil, but who hath been infected by contagion from another, and so this evil at this day is propagated only by contagion.

The first
original of
the veneral
Disease.

Whether it
were first of
al an epi-
demical dis-
ease.

But how, and from what causes this Disease was raised, when it first appeared in Europe, Authors are diverse in their opinions; and whenas they themselves, who lived about the rise of this disease, could not agree in this business, by much less shal we which are now removed above an age from that time, be able to reconcile them; therefore we shal only reckon up their opinions. The most learned *Leonicens*, and *Fracastorius*, and certain others, were of this opinion. That this disease at its first rise was epidemical, and proceeded from a common cause, when at its first beginning, boyes, men, old folks, Girles, women, were infected, and as *Hieron. Fracastorius* writes *de morb. Gallic. cap. 7.* Though the greatest part of mankind hath contracted this disease by contagion, it hath been observed, that a number of others, infected by themselves without any contagion, have suffered this disease. Besides *Fracastorius* thinks it impossible, that in so smal a time, contagion which of it self is slow, nor is not easily received, could spread it self over so many lands, being first brought by one fleet of the Spaniards, when it is plain that either at the same time, or very neere it was seen in *Spain* and *France*, in *Italy* and *Germany*, and almost al *Scythia*; which if it be so, there is no reason, why we should not grant this disease to have been first of al epidemical: yet this makes me doubtful because that no German Physitian, nor of the neighboring places, hath taken notice, that this disease was knowen in Germany about that time. In which it appeared in *Italy*, when notwithstanding they have most diligently described, the English sweating disease, the disease in *Hungary*, and the like diseases newly sprung up.

But what was the cause of that epidemious disease, if it were such a one, those Authors themselves do differ in opinion; indeed they agree in this. That it had its original from the fault of the ayre, but whence the ayre contracted that fault, therein they differ. Some were of opinion, That this disease had its original from the great inundation of *Eiber*, and other Rivers, which hapned in the time of *Adrian* the sixt, Pope of *Rome*: for the Summer following they think by that corruption and filth left by the waters, the ayre was infected with putrefaction, and thence this disease did proceed. But truly this evil cannot be imputed to that inundation of waters, since that happned chiefly at *Rome*, but this disease first appeared at *Naples*: besides, those inundations of waters are wont rather to cause pestilent diseases, and there has often happned such inundations before, yet such a disease was never caus'd by them before. Others do more probably (if this disease were at first epidemious) refer the cause to the Stars. And *Fracastorius* writes concerning this business, *lib. 2. de morb. contag. cap. 12.* That it ought not to seem wonderful, that new and unusual diseases do appeare at certain times, and he proves it by examples and histories of divers diseases; and to pass by others, in the memory of our Grandfather that malignant Feaver raged, which is commonly known by the name of the English sweat, the like of which we have not read in any History before, wherefore he thinks it is not strange, if also the French disease not known before through many ages in our Orb, did now first of al break forth. And there wil come (saith he) other
new

new and unusual sicknesses, when time shall bring them; as there was the thing out amongst the Ancients, which afterwards was seen no more. This same disease will dye and be extinguish'd, and by and by again will be renewed, and seen again by our Nephews, even as in former Ages, it is to be beleev'd, it was seen by our Ancestors, for which there are no small signs yet evident. A certain Barber a friend of mine, had a book of certain experiments, very ancient, amongst which was written one amongst the rest, whose title was, For the thick scabb, which happens with the paines of the joints; he therefore when the disease was very fresh at first, remembering this medicine, asked counsel of some Physicians; whether he might use that medicine in that new contagion, which he thought was signified by that thick scabb: but the Physicians viewing the medicine, sharply forbid him, because it consisted of quicksilver and sulphur. Happy man if he had not consulted with those physicians, being like to be very rich with an incredible gain; but he obeyed them, nor durst not make tryal of his medicine, which at last he did try, and finding it to be excellent good, he was very sorry, that he had used it too late, the profit being now carried away by others. Thus far *Fracastorius*.

But he refers the cause of this disease newly sprung up, to the conjunction of *Saturn*, *Mars*, and *Jupiter*, which hapned at that time. Others hold that in the yeare, 1483. In the Ides of October at two of the clock after noon, That there was a conjunction made of *Mars*, *Jupiter*, the *Sun*, and *Mercury* in *Libra* in the eighth house, which is the house of Sicknes, and that *Jupiter* was burnt; and furthermore the same yeare on the Calends of November in the same house and signe, there was a conjunction made of *Mars* and *Venus*, also of *Jupiter* and *Venus*. Others as *Nicolaus Massa de morb. Galic. cap. 6.* refer that disease to the conjunction of *Saturn*, *Mars*, and *Venus*, which happened in *Scorpio* about the rise of this disease. But as it is not impossible, for certain configurations of the Stars to induce certain diseases, so no man is able easily to render the specifick cause of this disease, if it were epidemious. Truly all the effects of the Stars are good and benigne, and nothing evil in it self doth proceed from them; yet by accident it may come to pass, while they alter the ayre & the bodies of men after this or that manner, that they may produce evil diseases, whenas in their way they are Authors of the generation and corruption of natural things, but that they could produce this disease in specie, I think is not yet explained; and *Fracastorius* had hopes indeed, that this disease was in its old age in his time, and that in a little while after it would cease in the alleaged place; as also in his *Syphilis*, in these Verses.

For when the Fates shall please again, you'll see
Ere long, that in dark night 'twill buried be.

But his hopes hath deceived him, whenas now it hath lasted above a hundred and forty yeares, and hath bared nothing of its cruelty, as most are of opinion.

Others on the contrary think this disease was not epidemious, but sporadical and contagious; and first of all this perswades many, because it hath lasted even unto these times, whenas epidemious diseases, which have been raised by the influx of the Stars, have ceased a little while after. And therefore they do not think this disease ought to be accounted for epidemical, whenas it hath already lasted above 140. yeares; unless perhaps this reason may be given for the continuance of this disease, because the infection of this disease is not shunned, as that of the pestilence. For if the Plague begin to spread any where, all people, as much as they are able, and 'tis possible for them, do fly from the conversation of the sick, and reject all infected household stuff; nay in *Italy*, if the Plague begin to spread in *Germany*, or other neighbouring Countries, they stop up all publique waies, and deny all strangers that are suspected, any admittance into *Italy*; But many men knowingly and willingly have to do with suspected Harlots, and publique Stews full of infected whores are tolerated; therefore if the same diligence and curiosity, which is used in some places in the time of the pestilence to exclude the infected and suspected persons, from the society of others, were made use of to restrain that rambling whoring, perhaps

How the
Veneral dis-
ease was
brought into
Europe.

perhaps this disease also though it be contagious, might be rooted out. Yet the same men who think this disease is not epidemous, but sporadical, and contagious, are againe divided into divers opinions concerning its original: For some were of that opinion, that first of all it had its rise at *Valentia*, in *Hispania Tarraconensi*, where one sick of an Elephantiasis, bought a nights lodging of a noble Whore for fifty peices of Gold, and infected her, and thence it came to pass, that others who had to do with her were infected, and so in a short time this evil was disseminated amongst a many. But the Idea of an Elephantiasis is one, and of the Veneral disease another, and therefore one sick of an Elephantiasis could not raise this disease.

Leonbar-
dus Fiora-
vanti his o-
pinion of
the Veneral
disease.

Others think this disease was first brought out of *India* by the Spaniards into the French Army at *Naples*, who maintaine that this disease was epidemical in *India*, of which we spake before, *Cap. 1.* But for what reason 'tis epidemious in some Countries in *India*, whether by the fault of the aire, or water, or provision, is not yet explained by Historians.

Leonbardus Fioravanti, a famous Empirick in his time in *Italy*, hath a peculiar opinion of the original of this disease, which I have met withal in no other writer. For he in his book written in the Italian Tongue, which is entituled, *Capricci Medicinali di M. Leonardo Fioravanti, Libri tre*, writes thus of the original of this disease, both amongst the Indians, and in the French Army at *Naples*, *lib. 1 Cap. 26.* When saith he, there was War between the French and Spaniard at *Naples*, and there was great want of provision, especially of flesh, those evil employed merchants who brought victuals to the Camp, had privately prepared the Carcasses of dead souldiers into divers kinds of meates and dishes, and sold them every where about to the army, which flesh, whan as they had eat of it a long time ignorantly, most of them were taken with this disease, and became full of pustles and paines, and many also had their hair fall off; and he writes, that he knowes the business was so, from one *Paschalis Gibilottus*, a Neapolitan, an old man, of ninety eight yeares of age, who hath told him, that at that time when *John* the Son of *Renatus*, Duke *Andegavensis* waged war against *Alphonsus* King of *Naples*, about the yeare 1456. that he hath often heard from his father, who was such a Merchant in the Army of King *Alphonsus*, that in want and scarcity of victuals the Souldiers on both sides by eating of mans flesh, which they fed on for a long time, contracted this disease, and the same *Fioravanti*, adds, that he might be the more certain of this business, he bred up a Sow in his house, and added to all her meat somewhat of hogs flesh, and that within few dayes her bristles and hairs fell off, and she became full of pustles; then, that he fed a dog for two months only with dogs flesh, which afterwards became full of pains and pustles, and lost his hair. From which experiments he concludes, that every living creature if it be nourisht with the flesh of its own species will be taken with this disease, which at this day is called the French: and he thinks this is the very cause, that this disease is epidemious in the *Indies*, because there are those man-eaters, which do feed on mans flesh.

But truly I do wonder that so many Italians and French, who have writ of this disease have made no mention of this cause, neither does the relation of that old *Neapolitan* seem to fit with the time. For that disease was not known in the year 1456. at which time *John* the Son of *Renatus*, Duke *Andegavensis*, waged War against *Alphonsus* King of *Naples*, but in the War which *Charles* the eight King of *France*, waged with *Alphonsus* King of *Naples* about the yeare 1493 or 94. then grant it be, that if a creature nourisht with the flesh of those of its own kind, be taken with pustles and paines, and suffer the falling off of the hair, yet the question stil would be, whether that disease be the very Veneral disease, and such as may be transfered by contagion to others, and especially by Venery. For the essence of the veneral disease doth not consist in pustles, and the falling of the hair, but in an occult malignity, by which also its ulcers do differ from other ulcers. Yet it is easy for any one to make tryal, of that which *Fioravanti* experienced. And if the business

business should be confirmed by experience, that if an animal nourish with the flesh of its kind, do contract this disease, thence a reason may be rendered, why this disease is endemious to the people of *India*, to wit, because its inhabitants do feed on mens flesh: although here we meet with a doubt, for all the people of *India* are not men-eaters, and therefore we must enquire out of the Histories of the *Indies*, whether this disease be endemious amongst the men-eaters only, or amongst the other people of the *Indies* also.

Andreas Cæsalpinus, lib. 4. de morb. Cap. 3. writes that he hath another History of the original of this disease; delivered by them who were present, to wit, from an Aretine foldier, who served in that war; he related that there is a town in the *Vesuvian* Mount which is called *Suma*, where there is plenty of generous wine which is called *Caudy* wine, which was privately left by the Spaniards in the night, when the French had besieged it, but they infected their wine by the mixture of blood which they drew from them which were sick in the hospital of *St. Lazarus*; and the French men entering in, when they had filled themselves with that wine, began to be sick of diseases and symptomes, like unto the Elephantiasis. But if this were true, rather the Elephantiasis than the venereal disease had been thus raised.

*Andreas
Cæsalpinus.*

Aurelius Minadous de Virul. Vener. Cap. 30. propounds a peculiar opinion, & holds that this virulency did first break forth from the most filthy wombs, of most impure Harlots; and for this cause, because no body that hath lived cleanly, or that hath conversed with a cleane woman, is taken with this evil: but he thinks this evil proceeded first, when women were made very unclean, when they had received a various mixture of seeds. For as saith he one sort of meat, is the cause of health in a good stomach, but variety of meats doth oppress the stomach, and breeds an acid and nidorous crudity, and every where heaps up excrements; so one seed only is familer and wholesome for one womb, and causeth fruitfulness, on the contrary the multitude and variety of seeds, doth so affect the womb, that by its corruption it produceth bad, nay the worst of excrements, and from that sordid substance there is a corruption hard to be explained, or putrefaction which doth generate such venenate excrements. But when as he might easily understand, that those rambling lusts were in use not only in the war at *Naples*, but long before when there was publique Brothel Houses at *Rome*, and yet there was no such disease raised; he would have his opinion to be understood not of any women, but only of the *Indian*. For they by the mediation of the Heaven, Air, Waters, and those places, by their peculiar form of feeding did contract this poyson, which afterwards by *Columbus*, and the Spanish Army was disseminated in *France*, and hence through the whole world. But though it must not be denied, that the constitution of bodies is divers in divers Countries, and I remember that I have read in the Histories of Navigation, That when certain people of *Europe*, had found certain *Ethiopian* lasses playing on the sea shore, and had layn with them, presantly some of them died; yet how the business is in *America*, is worthy of further inquisition: and if there be any such fault in those women, 'tis probable that comes to pass, not so much from the commission of divers seeds, but rather as many Authors report, from this, That if any one have to do with a woman in *India* whiles she hath her courses, he is taken with that disease; for that whenas 'tis every where unwholsome, and therefore also was peculiarly and severely forbidden the Jewes by God in holy Writ, may in a special manner be hurtful in the *Indies*.

*Aurelius
Minadous.*

Therefore letting these pass, let us hold fast this, which is granted by all, that this disease at this day is no otherwise contracted, but by contagion, and chiefly by lying with those that are infected, whence deservedly doth *Gabriel Fallopius de morbo Gallic. Cap. 13.* Wittily deride those women, who when they were sick of the Venereal disease, nevertheless did boast themselves to be chaste, and said they contracted this disease by sprinkling themselves with the holy water which was infected.

But this contagion, by which only now adayes, we say this disease is disseminated, is received divers waies. For sometimes 'tis transferred with the seed and menstruous

*The Venereal disease
is contracted only by
contagion.*

*How many
waies the con-
tagion may be
contracted.*

Sometimes struous blood from the Parents to the Child, and the Disease becomes Hereditary; *is Here-* for when the blood, out of which the Seed is generated, is infected and vicious, the *ditary.* like Diseased seed is generated, also the Mothers blood being impure, with which the Child is nourisht, it Pollutes that, which pollution afterwards in those brought into the World doth sooner or later shew it self, according to the greater or lesser strength of that virulency: which manner of original of this Disease, if any one will deny to be properly by contagion, because it is not by the contract of two bodies, viz. a sound and a sick, he may for al me; yet let him know this, that then that malignity in the body of the infant is not generated, but from the infected parents by the seed, or the Mothers blood is communicated to the off-spring.

But by those that are born into the world, the same evil may be contracted two waies: the first is, when with the nourishment and milk, the evil is communicated to infants by impure Nurles; which way indeed is the powerfullst of al: for whenas the milk they suck is changed into blood, and that is the nourishment of the whol body, the poyson this way is dispersed into the whol body, and insinuates it self most intimately with it, and therefore those that are this way infected, are seldome cured, and not without a great deal of Difficulty.

Whether it can infect at a distance. The other way is by contagion so called properly, and in specy; where first of al is enquired, whether there be any contagion in the Veneral Disease at a distance, so that if one do neither touch with his body one infected, nor the fuel which contains in it the contagion, yet nevertheless may be infected with the Veneral Disease; truly there is no example given of this cause, but what *Manardus* teacheth, Lib. 7. Epist. 3. and also some others affirme that there is a French Ophthalmy: but when as this Disease of the Eyes in other cases is oftentimes contagious, it is no wonder, if one conversing with a sick man that is troubled with a French Ophthalmy, and earnestly look upon his Eyes, that he also may contract such an Ophthalmy. Yet this cannot be granted, that as the Plague may be transferred by the Air to others in distant places, so also the Veneral Disease may be communicated; for dayly experience doth Testifie, that Physicians and many others, do familiarly converse with those infected with this evil, yet are not infected by them.

Therefore this evil is chiefly contracted by contact, and truly most frequently by whorish Copulation, when that virulence is communicated to the naked genital parts being soft, and porous, from the genitals of the other infected person; after which manner this Disease was first brought out of the *Indies*, by the Spanish Souldiers infected by the *Indian* Women which were sick of this Disease, into *Italy*, and disseminated through the French Camp, and hence spread throughout all Europe, as we said before according to the opinion of many Physicians. And though some as we said even now, who have been infected with this Disease, endeavour to renounce the Cause of it; yet many if they live not chastly, yet they live closely, and *Gabriel Fallopius*, not without a Cause *de Morb. Gall. cap. 10.* scoffs at certain chaste Matrons, as they boasted themselves to be, who said they contracted this Disease by sprinkling them with holy water which was polluted; he that beleeves this, let him beleve that too, which *Averroes* writes, 2. collect. cap. 10. that a woman was got with Child in a bath, from some seed which wicked men had spent there: or with *Vallesius* let him correct the Aphorisme, 36. Sect. 6. because many Monks have been sick of the Gout before the use of Venerie.

How men are infected And truly men contract this evil from Women that are infected, because in the act by reason of the concurrence of spirits, and the motion, the Womb being heated, by women in Vapors are raised from the Malignant Humors in the womb, which are sucked in by Copulation. the mans yard being of a porous constitution, and are received into the veins. But the man being infected, may infect a sound woman, either by his yard, if that be infected

How Women by men. and exulcerated, or by his seed, although his yard be not ulcerated, or both waies: for though the seed in men is not always wholly corrupt, whenas we see many men infected with this disease do get children; yet it is altered & infected, from whence not only the

the Issue contracts this evil, but also a Woman may be infected by it.

But though this evil be most frequently contracted by whorish Copulation, yet by *Other waies* contagion it may be derived to others, other manner of waies, viz. by sweat, if any one *of contagion* sleep in the same bed with one infected with the Veneral Disease, and be wet with his sweat; then by the filth and Excrements, or that flowing from Ulcers, and sticking on the Linnen, bed, or shirt, and garments, if any one lie in them, or put them on. The same Disease also may be communicated by flaver or spittle, so lovers are infected with the Kisses of Whores sick of this Disease, and infants by their Nurses, or if any one drink out of a Cup, or sup out of the spoon, which one sick of this Disease did use a little before; besides, infants may be infected another way, to wit if, they touch the breasts of an impure Nurse with their mouth, and that for a double reason, either because they suck the infected and corrupted milk, of which I spake before; or because the breasts and nibbles of the Nurse are exulcerated: on the contrary, Nurses may be infected from infected infants, especially if they be troubled with Malignant pustles, or some Ulcer in the mouth; for the Nepples of their breasts whiles they are sucked by the Infant, grow hot, and their pores are more opened, whereupon they ealier receive in that virulence.

But no body is easily infected by the breath, as was said before, and without danger we may be conversant in the same chamber with those that are infected; neither are those Chyrurgions and Physitians which cure the veneral Disease, and dayly converse with the sick, any way infected; and if this Disease were contagious by breathing and at a distance, the whol world would ere now have been French, and the Disease would be more than Epidemious, as one writes; yet if any one sleep in bed with one infected, that he do receive his breath very neer, I wil not promise him free from this evil; whenas I know, Wives that have been infected by their Husbands sick of the Phthilick, and afterwards died of it.

This contagion after 'tis received into the body, staies not in those parts in which it was first received, but after the manner of other poysons, penetrates into the innermost parts of the body: and truely oftentimes discovers it self presently, within a few daies, somtimes lies hid a long while. And *Fernelius* writes, *de abdit. rer. Caus. Lib. 2. c. 14.* That it doth somtimes returne and revive after thirty years past, and for so long space the fewel of the disease does lie hid as dormant, and nevertheless they who thin k themselves free from al hurt, and that they are perfectly sound, do corrupt those with whom they lie, and beget an Issue posselt with that Disease. The same is witnessed by *John Philippus Ingrassias*. And *Hercules Saxonia de lue Vener. cap. 11.* relates that he cured an *Illustrissimo*, who had knobs of the French Disease came out upon him, five and twenty years after he had taken the Disease.

But what parts this virulency doth principally assault, we said formerly. Authors did disagree, where we treated of its subject; many indeed do hold, that this virulency is chiefly an adversary to the Membranes, because the pains do most of al arise about the Periostia, and external parts, where are many Membranes, in the head, Legs, Arms, breast-bone, and in them the periostium being eaten off, are raised knobs. But not only the Membranous parts are affected, but others also, as the Buboës, Tumors, Ulcers in divers parts, rottenness of the bones, falling of the hair, running of the Reins do testifie. And therefore we must enquire for a more common subject, which we said above was the Liver, and the similar parts dedicated to nutrition, and that have consent with the liver; for after the contagion hath pierced as far as the Liver (though in the interim it may corrupt the parts neer unto that, by which the Contagion was received) and hath imprinted a Malignant disposition on that, Sanguification is hurt, and a Malignant quality is imprinted on that blood, which is generated in the Liver, and so with the blood are generated Malignant Humors, which whenas they are troublesome to Nature, they are thrust forth to the Circumference of the body, and so

How the Veneral virulency doth penetrate into the body.

What parts are chiefly affected.

not only pains are raised in the Membranes, but divers Diseases and Symptomes also in other parts; and whereas the bones are not free, but they are oftentimes affected with rottenness, it is no wonder that the neighbouring periostia are affected, and most cruel pains raised.

The manner of the generation of the venereal disease. From all which it doth easily appear, what is the manner of the generation of this Disease, to wit, When the contagion of this Disease is communicated from one sick of the Venereal Disease, either by the seed and blood of the parents, or by the sucking of infected milk, or by Copulation, or by spittle, or by meat and drink, or by garments and Linnen, to any part of a sound body, first of all the part which receives the contagion is affected and hurt, hence through that, the evil creeps into the Veins, and by them penetrates to the Liver, which when it hath put on an evil disposition, and contracted a Malignant Disease, it generates vitious blood, containing in it the Seeds of the venereal Disease, which whenas it is an enemy to the body, by the expulsive faculty 'tis driven from the more noble parts to the Circumference of the body. And from thence the nourishment in the whole body is hurt, from whence are raised spots, Tumors, and divers buncings out, Ulcers, falling of the hair, pains, and other evils.

The definition of the venereal disease. At length out of all those things which have been said hitherto of the Nature and causes of the venereal disease, we make this definition of this Disease. The venereal evil is an occult Disease, and peculiarly Malignant, taken by infection, and is infectious, chiefly an enemy to the Liver and nutritive faculty, and therefore nutrition being hurt in the whole body, it raiseth divers Diseases and Symptomes.

CHAP. V.

Of the Differences of it.

The Differences. BY some indeed there are reckoned up very many Differences of this Disease, and by *Brassavola*, 234. but many of them unprofitable; the most necessary and profitable are these.

First of all, as concerning the very essence of the Disease whenas that is unknown, from that of it self, we can raise no difference: yet because its activity depends on that essence and occult quality, these differences are fetched from thence, because the activity of this disease is sometimes greater, sometimes less. And Physicians have observed, that sometimes after unwholsome Copulation, the French Symptoms have presently come upon men, but somewhat gentle, and a little while after have ceased again, without the administration of any remedy; but sometimes most grievous Symptoms have presently come on them, and the evil hath been rebellious, and could by no means or very difficultly be

At its first rise this disease was more grievous. cured. And the writers of this disease report, That this Disease when it first appeared, had far more grievous Symptomes, than now it hath: but what was the Cause of this business, is not so clear. That might happen first of all, from the disposition of the bodies that were infected. For whenas it appeared first in the Camps at Naples, and there was a great scarcity of provision, and a famine, doubtless in those bodies also, there was provision of evil Humors for Diseases, on which when this contagion fell, there it took strength and increased: besides this might make somewhat to that business, that in the beginning, the cure of this Disease was not sufficiently known, whence it came to pass, that this malignity always grew worse. This happens also in the Plague, of which the more there die, the poyson always grows the more vehement. For the malignity is fermented as it were, and exalted in the bodies of the sick, unless it be opposed and overcome by Alexipharmacal means.

Secondly,

Secondly, its Differences are taken from the causes and manner of contagion while sometimes the Venereal Disease is hereditary, and is derived with the seed and blood from the parents to the Issue: but sometimes after the birth, is communicated by Copulation, Kissing, Milk, Garments, and the like.

Thirdly, the third Difference is taken from the Diseases and Symptoms supervenient, that this Disease is sometimes with Buboës, sometimes with running of the Reins, sometimes with falling of the hair, sometimes with pains of the joynts, sometimes with other Symptoms; neither do the Symptoms which follow it, and shal afterwards be reckoned up amongst the signs, alwaies appear the same in all people: and *Eustachius Rudius* writes, *Lib. 5. de Morb. occult. Cap. 9.* That he hath observed a thousand times, that many young men have on the same day copulated with one and the same whore, and yet notwithstanding one hath been taken with the running of the Reins, another with a Bubo, another with rottenness, another with pain in the Head, another with falling of the hair, and another with another different preternatural affect; which doubtless happens, by reason of the various indisposition of bodies, and weakness of parts, and variety of Humors. For weak parts do more easily receive vitious Humors, than the strong. And one body is more clean, another more foul, and abounds with these, or those Humors, which when they are corrupted by the venenate Humor, do cause these or those Diseases and Symptoms: therefore if we should number up the Differences according to the variety of Diseases, and Symptoms, which are sometimes joyned together and complicated, sometimes Fewer, sometimes more, we might make very many indeed, of which as was said even now, *Brassavola* reckons up 234. more Nicely than profitably.

Fourthly, the fourth Difference is from the time, that this Disease is sometimes new, sometimes inveterate, one in the beginning, another in the augment, another in the state, and another in the declination.

Out of which, and especially from the Difference of time, and the variety of Diseases, and Symptoms that accompany this Disease, *Julianus Palmarius*, doth commodiously constitute four degrees of this Disease, *de lue Vener. Lib. 1. cap. 4.* The First and lightest degree is, when only the hairs of the Head and beard do by little and little fall off, without any other hurt of the body. The Second degree is worse, when the whole Skin is spread over with many spots not bunching out, and those sometimes small, like to a lentil speck; sometimes much broader, and both, sometimes red, sometimes yellow. The Third degree is yet more grievous, when not only spots but true pustules and bunches break forth, first of all indeed about the forehead, and Temples, and behind the Ears, then every where in the Head, and at length in the rest of the body. The Fourth degree is, when now the Disease being inveterate, it assaults and corrupts the solid parts, the bones, Ligaments, Membranes, and Nerves. In which there are collected many thick, glutinous, and maligne Excrements, which when they rest about the tendons, or the Periostia, and prick and pull the Membranes from the bones, there are wont to be caused implacable pains, growing worse towards the night, from which Excrements also by degrees do grow hard knobs, with far greater torment which are equally hard as the bones. Which if they be fixt in the bones, they do so enlarge and distend them, that the bones oftentimes become of a monstrous bulk and figure: moreover that malignity and Acrimony doth by degrees eat away, and with rottenness consume the bones, and for the most part not hurting the Skin that lies over them: and *Palmarius* writes there, that he hath seen many in whom the Pericranium, and the Skull under it, hath been found wholly eaten away with putrefaction, and consumed with rottenness as far as the dura mater, the Skin of the Head not being hurt at all, without any Feaver, and

Degrees of
the venereal
disease.

without vomiting, of which one or two have been seen living without a Skull. Of which by and by shall be said more in the Diagnostick and Prognostick signs.

CHAP. VI.

Of the Diagnostick Signs.

BUT though out of those things which have been spoken before of the History of this Disease, the Diagnostick signs of this Disease might easily be fetcht, yet in this place the same are to be propounded in specy. But first of al, we must remember this, those signs as *Galen* teacheth, 1. Aphor. 17. and else where, which ought certainly to denote a Disease, which are commonly called Pathognomonical, ought to be not only proper but inseparable, so that where they are, there is the Disease, and they being taken away the Disease is removed. But though as in many other diseases, so in the Veneral, there is not one sign, by which the Disease may be known, yet a concurrence of signs, may do the same. Yet what that concurrence is in the Veneral Disease, is not easie to define: whenas in this Disease there is a great Accumulation of Symptoms and Diseases, and therefore this Disease hath affinity with other Diseases. Which thing doth cause, as was said before, that many when they saw almost the same concurrence of signs, in that Epidemious disease, which *Hippocrates* propounds, the 3. *Epid.* they thought the Veneral Disease was described there, and others referred it to the Elephantiasis, but the reason why it is hard to define the concurrence of signs in this Disease, is this, because the Liver and nutritive faculty of the whole body is chiefly hurt. For when the heart or brain is hurt, their hurt actions do easily appear, being such as are simple, and restrained to few parts. But when as the Liver affords nourishment for the whole body, from thence if nourishment be hurt, do happen divers Diseases and Symptoms; for though the nutriment of the whole body be one, that is blood, yet almost an innumerable variety presents it self in every part, according to the variety of the parts which are nourisht, whenas 'tis necessary that every part do peculiarly assimilate its nourishment; yet if we consider the precedent causes, those things which are present, and what things are helpful, what hurtful, or the Remedies, neither can this Disease lie undiscovered.

As concerning the causes, first of al if the parents be, or have been sick of this disease, and some signs in the infant present themselves, which argue the Veneral disease, there is scarce any reason to doubt of the Disease. In like manner 'tis, if an infant have sucked a nurse sick of this disease.

But if any one born of sound Parents, and nourisht by the milk of a sound Nurse, yet have diseases and some Symptoms, which give suspicion of this Disease, we must diligently enquire, whether he hath had to do with infected persons; which if he confess, the case is plain, and there need no further doubt of the species of the Disease; but if, as it often falls out, one to preserve his Honor and reputation, deny that he hath acted any such thing, then we must enquire into the condition and course of the life past, of the husband or wife, if the party be married. For from these things sometimes we have no slight conjectures of the infection. But if there be no ground for such a conjecture, we must further enquire, whether he hath slept in the same bed with one infected with that Disease, or hath used his garments. But if out of al these there can be had no firme conjecture of this Disease, the present state of the patient is diligently to be considered, which indeed is one in the beginning of the Disease, another in the increase, and another when 'tis inveterate; whence also the signs of this Disease, beginning, encreasing, inveterate, are wont commonly to be delivered. And truly to know this Disease when 'tis Inveterate, is not very difficult, as shall

shal be said by and by: but whiles it yet lies, and is in the first blade, then to know it, is not so easie. For as plants and trees when they are at ful growth, are known by the vulgar, but to know them at their first appearance, is the part only of an artist and good herbarist. So also this Disease, when it discovers it self by diverse Diseases, and Symptomes, 'tis known even by the vulgar, but when it lirks in obscurity, 'tis not discovered but by experienced Physitians.

Yet there are some signs, which may discover this Disease, even at the first beginning; the first is, that they who are taken with this Disease do presently (without the appearance of any signs of a Feaver imminent) perceive a kind of weariness and heaviness in their whol body, and sometimes a drowsiness after sleep. There is a vehement and wandering pain, which is felt sometimes in the Head, sometimes in the Muscles, sometimes about the joynts, and this pain is more troublesome towards night than at other times of the day. The fresh color of the Face is changed strangely, and some write, that there is a Livid circle appears under their Eyes, such as we usually see in Women that have their Courses: there is added to these a sadness, fear, and those that before were merry and jesting, become sad and pensive without any cause. All which signs are of greater force if the signs of the Veneral Disease did go before, and vanish without any convenient, and sufficient means. And truly if this evil be contracted by Copulation, and hath not yet plainly possesst the Liver, but sticks yet in the Privities, then chiefly this Veneral Disease at its beginning, discovers it self by the running of the Reins, Ulcers in the Privities, and buboes, for when that Malignant vapor, is first of al communicated to the Testicles and genital vessels, the seed is corrupted, and the generation of seed is depraved in the genital vessels: whence instead of good seed there is generated a stinking and corrupt Humor, which doth irritate Nature to expulsion. From whence also the Gonorrhæa, although improperly so called, is easily distinguished from that running of the Reins which is not French, because this gallical is joyned with a great heat, and pain, sometimes also with an Inflammation of the Testicles, and Vessels resembling a varix; the matter which is cast forth is far different from seed, viz. Yellow, green, Acrid, corroding the glans; neither doth it yeild to those Remedies, with which a true Gonorrhæa is cured. Next of all there appeare pustles in the Privities about the bigness of a grain of Millet, and sometimes they compass the whol Ring, which when they are broken, there remain white Ulcers which in process of the Disease grow deep and callous, of divers colors, and with pain joyned with them. Thirdly, also Buboes show forth themselves in this Disease; for though sometimes the Buboes do precede an Erysipelas or a Rose, yet then there went before those causes which do effect a Rose, as fear, frights, anger, and the bubo is extended towards the Thighs, as it were by a red line, and a little after the Erysipelas breaking forth, it vanisheth; but if the Bubo be Veneral, 'tis not extended according to the longitude of the Thigh, but rather obliquely, and imitates the situation of the spermatick Vessels. For in unwholsome Copulation the seminal vessels are easily first of al infected, which whenas they have their Original from the Vena Cava not far from the Liver it self, that virulency is easily communicated to the Liver, which being affected drives it back again by the same waies from it self, from whence are caused both the Buboes, and the running of the Reins. And thus these two Diseases are for the most part complicated, and being Joyned are a sure sign of the veneral Disease, and one failing the other is of force; but if this evil be contracted without whorish Copulation, and if by kissing, there are Ulcers raised about the mouth, if by giving suck to an infected infant, there are inflammations about the breasts, pustles, and clefts; if from Garments and common lying together, there are pustles every where raised in the Skin.

*The signs
of the veneral
disease
in its beginning.*

But

The signs But if the evil do now increase, and grow more grievous, and the virulency it self be of this disease already communicated to the Liver, and thence the nutrition in the whole body be depraved, diseases and symptoms of all kinds, such as were reckoned up before, *cap.* 2. in the history of this disease, do arise, which indeed though singly by themselves they afford not a proper and inseparable signe of this disease, yet if they be taken together, and their peculiar condition be diligently considered, they may clearly enough detect this evil. For there is scarce another disease, in which there is a concurrence of all these, nay there are many of them so proper to the Venereal disease, that they are found in no other disease after that manner. How the buboes which are seen in the beginning, and sometimes in the increase of this disease, may be distinguished from other buboes, was said even now; the venereal pustles are some of them crusty, others without a crust, the crusty are chiefly the signs of this disease, and sometimes they are eminent, that in the head and forehead they resemble the horns of a Ram, under which sometimes is contained matter. Sometimes none, and they appear in the face, head, beard, whole body, but especially about the privities and hips. And *Fallopian* writes that these kinds of Venereal tumors, may be distinguished from those which are not Venereal after this manner; That the Venereal if they be rubbed and the skin taken off, three daies after they appear unchanged, but benign pustles if they be rubbed, are increased by the attraction of blood, and that good, and alimentary. So the tumors which are commonly called Gummofities, if they be joined with a swelling, or do firmly adhere to the parts void of flesh, and the bones, especially if they be in the head, forehead, in the fore part of the Leggs, are a most certain signe of the Venereal disease: for the Venereal matter hath an eating virulency even in a crass humor, and joined with paine, the like of which is not in other tumors, which do proceed from a thick matter. But though ulcers do happen also in many other diseases; yet if they rise chiefly in the yard, and especially on the foreskin, and about the nut, and towards the end of the yard, or also in the mouth and palate, the uvula or jawes, and those to putrid and stinking, and there was no inflammation of those parts precedent, nor signs of the scurvy, they are also signs of the French Disease; also the falling of the hair causeth no light evidence of the disease; for if after childhood, no other disease foregoing, which is wont to be accompanied with the shedding of the hair, the hairs of the head, and especially of the beard and eye-brows fall off, and also there appear ulcerous pustles, or a filthy Scab, this is altogether a sure signe of the French Disease. In like manner Chapps and clefts in the Palms of the hands, and soles of the feet, if no other cause preceded, are an undoubted sign of this evil, so also those bunches sometimes low and broad, sometimes somewhat long, and those excrescencies which they call *callicus*, *condylomata*, and crusts, if they appear in the privy parts, or about the Arse-hole, do surely enough discover this disease; pains of the head, although they happen in many other diseases, yet if their bunchings out, and gummofities in the skin, if there was a Gonorrhea and it be stopped, if a bubo and it be vanished, those also are sure signs enough of this disease; paines also in other parts may likewise discover this disease, for if the paine be not in the very joints, but in that part which is in the middle of the bones, and neer to the Joints, as upon the skin, or upon the shoulder bone, which is between the head and the joint of the elbow, and they be most cruel and sharp, and are exasperated towards the evening and night, they are also sure signes of this disease. There is familiar also with this disease, such a distillation, by which there is emptied by the mouth, and nose, much flegm and watrish matter, by which the parts through which they pass are exulcerated; but in the first place the sure signe of this disease is that French Gonorrhea, of which was spoken before. Last of all this also is a sure signe of this disease, if the aforementioned diseases and symptoms be not taken away, or made more gentle, by medicines that do work by manifest qualities, applyed according to art, but rather do grow worse, but are mitigated by those proper and specifick remedies.

Least

Last of al, if this evil be inveterate, diseases and symptomes of al kinds may happen, callous, fistulous, and cancerous ulcers, knobs in divers parts of the body, *Signs of an* rottenness of the bones in the Leggs, Armes, especially in the Skul, the bone of *inveterate* the Palate and Nose, a Heetick Feaver, Consumption, Pthisick, evil habit of the *Pox.* body, Falling-sickness, falling of their teeth, Deafness, Blindness. *Vidus Viduus*, lib. 2. de curat. membrat. cap. 18. reports that he saw at *Barciconia* a Span- nish Souldier, who by the French Pox suffered a rottenness of Skul, and after- wards fel into an epilepsy, that filth distilling from his rotten skul, and pricking the membranes of his brain, from which notwithstanding he was freed by cauteri- zing his Skul with a hot Iron; and *Forestus* lib. 7. *Observat.* 9. in *schol.* relates of one infected with the French Pox, though he seemed to be wel cured, yet was afflicted with a long and continual paine of his head, which could be cured by no re- me dies, til at last his Skul being opened, there was found under it, upon the dura ma- ter somewhat black like a wevil, which worme when it was taken away, that pain cea- sed, nor returned no more. And *Johannes Schenckius* ex *D. Georg. Garneci ob- servat.* relates of one sick of the French Pox, that was il cured, who was taken with a great inflammation in his palate, in the five-like bone, in his uvula, and al the neigh- bouring parts, which presently turned to a Gangrene, and that to a cancer, that every day he voided somewhat, of those corrupt and putrefied parts, and the uvula, and next parts, being first of al cast forth, at last he spit through his mouth his very brain with a most noysome stink. And *Felix Platerus*, lib. 1. *observat.* makes mention of an Abbot who by the French Pox was made blind, deaf, and dumb, who could no otherwise understand and perceive the meaning of others, but if they with their finger or a peice of wood drew letters, expressing some sentence upon his bate arme, from al which singly perceived he made a word, and from many words a sentence: God the just Judg doth sometimes punish wandring lust, with so grie- vous and horrid a punishment.

As concerning the differences of this virulency, although its formal essence be un- known, yet there is a certain difference. According to its manner of acting and *Signs of the differen- ces.* its vehemency, which is known from its effects; for sometimes more, sometimes fewer: sometimes the contagion and active power is great, sometimes less: and *Eustachius Rudius* reports de *morb. occult.* lib. 5. cap. 10. that he knew some whores infected with so powerful a French Poyson, that al who had to do with them were not only presently infected with the same evil, but were wholly posselt with most grievous symptomes, which could not be removed nor mitigated, by any remedies, or art, nay some of them not long after died. But we know the vehemency of this evil, if as was said even now, some be presently infected, if the pain be most cruel, if the erosion pierce to the bones, if many putrid and stinking excrements proceed every where from the body. For by how much the evils are the more, and more grievous, by so much the power of this virulency is the greater.

CHAP. VII.

Of Prognosticks.

BUt that we may know, what hopes there is concerning the event of this disease, we must enquire whether the disease is like to be short, or long, whether easy or hard to be cured, and at last what end it shal have.

But first of al concerning this disease, 'tis wont to be questioned amongst some Physicians in general, whether it shal once have an end? *Fracastorius* indeed did *Whether this disease shal cease.* hope for it, as was said before, and thought, that even in his time this disease grew aged and that a little while after it would wholly die, chiefly for this reason, because he thought it was epidemicus, and took its original from the Starrs, which impressions of heaven do not last alwaies, but in process of time are changed, and because he saw

saw this disease did grow more mild. For as *Jul. Palmarius* writes of this subject *lib. 1. de lue Vener. Cap. 5.* it was reported, that this disease at its first rise was so filthy, that that which reigns now is scarce thought to be of the same kind; for there were innumerable ulcers, rough and standing out, in the figure and bulk of an acorn, a filthy humor flowing from them, and such a stink exhaling that his nose that it reached, was beleev'd presently to be infected. The colour of the pustles was between black and green, as much tormenting the sick with the sight of them, as with their pain. Therefore all people did shun the sight of them, and to abstain from touching them, as in no disease besides. But *Fracastorius* his hopes deceived him, for as yet we do not see this disease grow old, much less cease; and though the filthiness of the ulcers and pustles be more tolerable, yet in pains and torments it is grown more cruel, as the same *Palmarius* writes. It is more likely, that as long as those copulations and conversings with infected people, and wandering lusts shall endure, so long also this disease will last, and be propagated by contagion. For such is the nature of this poison that it doth not suddenly kill a man, in the interim those who are sick of that disease, are infectious those waies, of which we spake before. Whenas therefore there are every where many, who are polluted with that disease, and others converse with them, there is yet no hopes that this disease should cease ere long, whenas the effect doth not cease, unless the cause be taken away. Neither is that reason firm enough, which some who are of a contrary opinion do alledg; for they say whenas this disease is a contagion preternatural and violent, it must necessarily have an end, whenas those things which are preternatural and violent have not perpetual causes, and therefore must needs cease to be; but the answer is easie; nothing indeed that is preternatural and violent, is of it self perpetual, yet if the cause be perpetual, that also may be perpetual. Therefore though as the plague is sometimes extinguished, so this disease also might be, if the same diligence were used, which is in preventing and curing the plague, as was said before: yet because there are alwaies men, who are sick of this disease, and can infect others, and others do not abstain from their society, even this disease shall continue so long, as that contagion shall last. And therefore *Eustachius Rudius* rightly of this subject, *Lib. 5. de Morb. occult. Cap. 11.* writes, if there were one prince of the whole world, or one conspiracy of many of them against this disease, by the help of physicians this disease might be wholly rooted out; viz. if they who are sick of this disease, were all committed to physicians to be cured, in the interim were removed from the society of other men, and the same were done with the infected with this disease, as is wont to be with those infected with the plague or leprosie, there were hopes this disease might be extirpated; & for this cause too, because the Venereal disease is not contagious at a distance as the plague is, but for the most part is communicated by copulation, sometimes by kissing and garments. But here is no diligence used, and as the same *Rudius* saith, Theeves, robbers, and murderers, and other wicked persons are sharply punished, but publique whores full of this disease, and who daily destroy more than a thousand men, & pollute whole Families and Cities, are cherish'd, smoothen'd up with flateries, and kept gallantly. But leaving these, let us see what may be foretold of every particular diseased patient.

Prognosticks.

1. The Venereal disease for the most part of it self, is a disease of long continuance, for this reason, Because the liver principally, and the nutritive faculty is infected in it. But *Galen* teaches rightly, *5. de lo. affect. Cap. 2.* That of diseases of the heart all people die most speedily, of affects of the brain more slowly, but the life is longer protracted when the natural actions are hurt; and though the venereal disease be also malignant, and is not undeterredly reckoned amongst poisons in its kind, yet its power in acting is far slower, than that of other poisons: yet the vehemency or weakness of this poison in this or that body, and the disposition of the body, may make somewhat to the length or shortness of this disease; for if the poison be more vehement, the disease is the more dangerous, as shall be said by and by: if also the body before did abound with vitious humors, the evil is increased,

increased, and made longer : and indeed sometimes the stubbornness of this disease is such, that though it seem sometimes to be wholly extinct, yet it hath been observed that it hath sometimes grown fresh againe after many, nay, thirty years, as was said before.

2. But whether this disease wil be hard or easie to cure in any patient, must be judged from the greatness of the disease, and strength of the patient, as in other diseases. First of al, as concerning the nature of the disease it self, though this disease be far more gentle, than other venenate diseases, yet because it is not of the number of them which depend on manifest distempers, but malignant and contagious, it may infect al the humors in the whole body, nay it may pollute al the Similar parts, and hence it is hard to be cured.

3. Yet this disease when 'tis new is easier to cure, than when 'tis inveterate ; for in that new malignant quality, it only affects those parts, by which 'tis propagated and for the most part the privities, but in the inveterate disease, that very malignant quality is imprinted also on the liver, and from the liver again is communicated to the blood, and by the blood to al similar parts ; for it is false, as appears out of those things which have been formerly said of the nature of this disease, that the liver here is hurt in sanguification, by no disease, but only by reason of an evil object, which mixt with the blood and other humors, does pollute them, deprave and make them vitious, and convert them into its own nature : indeed 'tis not to be denied, that vitious humors also do corrupt the good, in the interim from good chyle also in a liver evil disposed is generated bad blood, which appears even from this, that through every part the nutrition a little while after is infected through the whol body, which could not be, unless the liver were hurt.

4. *Epiph. Ferdinandus* writes, Hist. 17. That he hath learned by experience, and that other physitians have observed the same, that those who being once cured are again infected with this disease, are either never, or with a great deal of difficulty recovered.

5. Although the nature of this virulency doth not consist in any manifest distemper, yet if it light on a body hot and dry, and especially endowed with a hot distemper of the liver, 'tis more difficultly cured. For whenas pock-wood, Sarsaparilla, and the like, are hot and dry, that hot and dry distemper is increased, and so, though this very disease be not increased, yet another damage is brought upon the body, and whenas those proper medicines cannot safely be administered, unless the body before were very wel purged, by these means 'tis heated and dried the more.

6. For the same cause, a hot and dry season of the yeare, as that of the summer is, is not so fit for the cure of this disease, whenas the strength is then Exhausted.

7. If also the strength be feeble, that it cannot undergoe those strong medicines which are necessary, or if the sick, out of custom or peevishness, wil not admit of necessary medicaments, 'tis made hard to cure.

8. If also a feaver, or consumption, or other grievous symptom, or disease be joyned, which may hinder the cure, the disease cannot easily be removed, as was said even now, of a hot distemper of the liver, and of the whol body.

9. If there appeare in the joynts, callous, Schirrous, and hard tumors, and those commonly called gummosities, the evil is hard to be cured, and is not rooted out, by most powerful remedies : for such tumors never appear, unless the evil be inveterate, and hath taken deep root, most of which are fixt in the bones under them.

10. Buboes in the groins if they be hard, and are not easily suppurated, and those which sometimes break forth, sometimes vanish, are hard of cure, because they signifie a stubborn matter, and a weakeness of nature in expelling it : but if they be easily suppurated, and the strength be firm, and especially the liver strong, they are arguments

guments of a more benigne Disease and matter ; and such Buboës, if they be kept open along while, may bring perfect health.

11. A roughness of the jaws which is attended with hoarseness, or an obscure, or no voice, do shew the evil to be antient and stubborn, and which wil scarce be cured.

12. Ulcers that are new in the Yard are easily Cured, but in the Arsehole, or about it, made difficultly, for they shew the evil is now inveterate : and such Ulcers are continually moistned by the Excrements, and Medicines cannot conveniently enough be applied to them.

13. Ulcers also in the joynts and other parts are most hard to cure, because they signifie an evil now inveterate, and which hath invaded the whole body.

14. Ulcers in the mouth and jaws are not easily cured, because also they argue the evil to be ancient, neither can convenient Medicines be applied to them, and they are continually moistned, by the Excrements falling from the brain.

15. If the bones of the nose be eaten, and there be also a slow Feaver, it signifies an evil incurable, whenas now the disease is communicated to the brain it self, or its Membranes.

16. Bunchings out in this disease, especially the broader, are not easily cured, and they argue an evil hard to be cured.

17. The colour of the Skin depraved, and the falling of the hair, if convenient means be applied, are not very hard to cure.

18. Pains especially in the Head, and upon the Shins, are oftentimes very stubborn, that they yeild to no Remedies, or at least not under a long time.

19. Vertigoes and falling sickneses are most grievous and pertinacious, for they shew that the Veneral Virulency, hath now possesst the brain it self.

20. Distillations also are lasting, because they also happen, only when the evil is inveterate, and the brain is affected ; the which are more dangerous and grievous, if they fall on the breast and Lungs, and exulcerate them.

21. Also the noise in the Ears is for the most part lasting, and scarcely removed, whenas there are divers windings in the Eares, and their expulsive faculty is weak, neither can medicines penetrate thither.

22. The running of the Reins also for the most part is lasting, or if it be stoppt grievous evils are wont to follow, and most heavy pains of the Head and Joynts.

23. But chiefly the Nature of the Contagion it self, from which the sick contracted the disease, doth manifest the force and greatness of the disease ; for this poyson hath somtimes a greater, somtimes a less activity, and Physitians do relate who have often had such Patients in cure, that somtimes of ten strong yong men, who have had to do with the same Whore, not one of them hath scaped, therefore if it be known, from what he or she, this evil was contracted, the Physitian may the easier judg of the event of the disease.

24. Other things being alike, this evil is easiest cured, which is contracted by Whorish Copulation, but that is harder to Cure, which the Infant hath sucked in with the milk, whenas the virulency goes into the stomach with the milk, and hence in the Liver there is generated a virulent blood, which afterwards runs through the whol body, and Pollutes that. But the Hereditary evil is hardest of al to Cure, and that which is communicated from infected Parents, with the Seed and blood.

25. As for the parts affected, if the Liver only be affected, the evil is the easier Cured, whenas it hath a strong expulsive faculty, and Medicaments can easily penetrate unto it : but the Spleen, Kidneys, Womb, and external joynts are not so easily Cured, but hardest of all the Brain, and the Lungs, because they have a weaker expulsive faculty, and Medicaments do not easily penetrate thither.

26. From al which 'tis easily collected, what wil be the event of the Disease, for by

by how much the more, and more grievous diseases and Symptoms are joyned with the Veneral disease, by so much the more the sick are indangered; by how much the fewer, and lighter, by so much the less: and those chiefly die, who to their putrid and Malignant Veneral Disease, have supervenient those Feavers they call Gallical; for the Veneral Virulency whiles it corrupts the Humors, and induceth a Malignant quality into them, makes the Feaver worse, and also debilitates the innate heat, whence neither the Feaver, nor that Malignant disease can be overcome by Nature.

27. Very many also die of a wasting of the body, and a heſtick Feaver, or rather a slow, and putrid one: for both the Veneral virulency it self, and the pains, watchings, and other symptoms do debilitate the innate heat, hurt nutrition, whence follows a wasting of the whole body, to which is joyned a slow putrid Feaver raised from the evil Humors.

28. Sanguification also being hurt, some die of a Dropsie.

29. Many also die by reason of Catarrhes, falling down on the jaws and Lungs, hindering and taking away their breath; or the Vessels of the Lungs being eaten by a sharp Catarrhe, and first of all spitting of blood being raised, then a Phthisick, they die.

30. Sometimes the Vessels being eaten in two by the acrimony of the Humors, and Vomiting of blood caused, the sick die by too great a Flux to the stool, or by the Womb.

CHAP. VIII.

Of Prevention.

WHenas 'tis safer to prevent a Disease, than to cure it, some Physicians endeavor to teach, by what means one may keep himself clear, though he have had to do with an infected Woman. Of which business *Fallopins* treats in the whole Chapter, 89. *de Morb. Galli.* and he writes that he should seem to have done nothing unless he teach, how one seeing a handsome Woman, and lying with her though she be infected, may be preserved from the French Disease: and he calls the immortal God to witness, that he hath made tryal of it in ten thousand men, and none of them was infected: and he propounds there two medicaments, by which the Contagion received may presently be drawn forth, dissipated, or dried up. *Hercules Saxonia*, propounds the same, *de lue Vener. cap. 16.* and does very much commend them, and as *Aurelius Minadous* speaks of this business, many confide that being guarded with those Medicines as with a buckler, they may enter the most infected whores, and freely ramble all the world over. *Eustachius Rudius*, also proposes the like Medicaments, *Lib. 5. de morb. occult. cap. 13.* But indeed I do not believe, that those things can be taught with a good conscience, by which so many men are encouraged to lust, whom perhaps the fear of this Disease might have frightened from it; and therefore we will say nothing of these Medicines; but *Aurelius Minadous* thinks they themselves are deceived, that teach such things, *Cap. 31. de Virulentia Venerea.* Where he overthrowes *Fallopins* foundation, who thinks that this Disease is only communicated by the least purulent bodies, which if they be wiped away, extracted, dissipated, this Disease may be turned off, and he teacheth that the Contagion doth not only enter by the external parts of the Privities, but also chiefly by the internal, and runs through the Body, and that the infected Vapors, and spirits do pass through the internal porosities, and are admitted by the Veins; and therefore no man can promise himself health and safety from washing, which only reaches to the external parts, nor from other Medicaments outwardly applied, neither can such external Medicaments take away the Pollution conceived within. The safest way therefore to avoid this Disease is to abstain from whores, and to

Prevention

remember that Whoremongers and Adulterers the Lord wil judg, who yet is wont also to punish them in this Life, with that most filthy Disease.

Yec Jul. Galmarius, hath another way of prevention of this Disease, to wit, by internal Medicaments, and he writes that he hath found out an antidote or a Muller, by the use of which mens bodies are rendered safe against this Disease, yet he entreats and conjures al Physicians and Chyrurgeons, that they do not communicate and make known that Medicine in obedience to lustful people, and that they make not themselves fosterers of lusts, but to them only who must necessarily converse with those that are suspected or defiled. But he describes that Antidote, *Lib. 1. cap. 8.* and this is it.

Take of the Amulet for the Pox, and of old Mithridate, by Galens description, of each six drams; Conserve of the flowers of Bugloss, of broom, of Rosemary, of each three drams; mix them, give one dram, or a dram and an half, or two drams at the most, in the morning two hours before meat, eight or ten daies together.

But if any one suspect himself to be infected, he admonisheth that he earnestly use a greater care for prevention: therefore let him take of the Alexipharmacal Medicine even now described, swallowing a dram, or a dram and an half in the morning and before supper, for eight or ten daies together, whose Verrure that it may reach the easier to the more remote parts, when they have swallowed it, 'tis expedient they drink presently after it somewhat of this Julep, by which as its vehicle it may be carried into every part.

Take of the water of blessed thistle, burnet, Devils-bit, of each two ounces, of Syrup of the juyce of Sorrel, of Lemmons, of each an ounce and an half. Make a Julep for two doses, to be drank presently after the taking of a dram and an half of the Amulet, in the morning, and two hours before supper.

But whenas al those simple Medicaments, which are in that Antidote, are not proper to this Veneral Disease, we must consult with experience, whether their vertue be so great, as *Palmarius* cries it up for.

CHAP. IX.

Of Indications.

Indications **T**Hose Indications which are in other diseases, are found also in this; to wit, That which is taken from the Disease, called in specky Curative: That which the cause doth afford, Preservatory, whether also are referred urgent Symptomes; and last of al the Vital, for they deservedly challenge a place in this disease, yet in the explaining of them Authors vary much, and as every one thinks of the Nature of this Disease, so also he teacheth concerning its indication and cure. We insisting on those things which we have formerly preposed of the Nature of this Disease, and have strongly proved, think thus of indications in this Disease.

First of al, whenas this Disease is occult, and Malignant, chief enemy to the Liver and nutritive faculty, therefore it affords a kind of genercial indication, but no specifical and profitable one can be had from thence, and therefore only experience, which hath found out Medicines working by an occult quality, hath administered profitable Medicines in this Disease: and unless the Spaniards had received from the Indians such Medicaments, as Lignum Sanctum, Sarsaparilla, China Root; and the boldness of Chyrurgions, and especially *Jacob Carpus*, had not fallen upon the use of Mercury, either by chance or by argumentation, whiles they read that *Avicen*, *Mesue*, and *Theodoricus*, made use of quicksilver, in certain pustles, and a crusty Scab, perhaps even to this day the true Remedies of this Disease would lie hid. But though the Remedies of this disease, were not found out so much by indication, as by experience; yet a Method in curing of it is not wholly excluded, but hath its place

place also, whenas 'tis necessary that those Medicaments found out by experience be rightly applied; and besides also Tumors, Ulcers, and the like Diseases springing from the corruption of Humors, have their Method, by which they are cured. Yet in this case we must have a care, that we do not look more on the manifest qualities, and known diseases, than on the occult Nature of the disease, in which business notwithstanding many do fail, who are tedious in curing of divers distempers, preparing the Humors, and directing their cure to these or those diseases. Whenas yet 'tis plain by experience, that in a hot, and in a dry distemper, and in an exustion of the Humors, as they speak, and in a Consumption it self, we do most happily use pockwood, and the like hot and dry things, and the Malignity being overcome, the rest do easily vanish.

Secondly, as concerning indication preservatory, here we must chiefly have respect unto that Malignity and virulency imprinted on the Humors, and that is to be destroyed by proper and Alexipharmacal Medicines. Yet if there be any other faults in the Humors, it will not be unprofitable also to mend them. And whenas the body is either burthened with a Plenitude, or abounds with vicious Humors, the malignity is the easier disseminated into it, and there is more plentiful matter prepared for putrefaction, and the force of the Alexipharmacal means is dulled, it is expedient to empty either the superfluous blood, or the vicious Humors, that the other Medicines afterwards may be administred more safely, more commodiously, and with greater benefit. *Preservatory.*

Thirdly, the Disease and various Symptomes, which supervene to the principal disease, and arise from the corruption of Humors, are al to be removed in their proper manner. *Curative.*

Fourthly, the strength is to be preserved, for as no other disease can be cured, unless there be strength of body, so nor this; and al attempts are in vain, unless at leastwise we have Nature willing. *Vital.*

And so there are four things chiefly to be done in this disease: First of al, if blood abound, that must be diminished, and if any vicious Humors abound, they are to be prepared and emptied, and if there be any manifest diseases, which may be an impediment to the proper Cure, as obstructions and the like, they must first of all be taken away. Secondly, the Malignity and virulency as wel that inherent in the humors, as that imprinted on the parts, and principally the Liver, is to be destroyed by the proper Alexipharmaca of this disease. Thirdly, the strength is to be preserved and confirmed, and first of al chiefe care is to be had of the Liver, which suffers in this disease. Fourthly, the diseases and Symptomes which are wont to be joyned to this disease are to be taken away. *Four things to be done in the Cure of the Veneral disease.*

Here we must clear a controversie, to wit, Whether this disease may be cured without sweating? Some are of this opinion, That this disease may be taken away, though sweat be not provoked: And first of al they prove it thus, Because this evil consists in a certain hidden quality which cannot be taken away but by alteration of the body, whenas contraries are cured by contraries: but that alteration may be affected by the proper vertue of antidotes and decoctions administred, without sweating. Next of al they alledge experience, by which it is evident, that by the taking of such Medicaments, some have recovered without sweating. Thirdly, they urge this, That those that drink the decoction of the wood are sometimes happily emptied by nature, by urine, by the stool, and not alwaies by sweats. *Whether the cure may be perfected without sweating.*

Aurelius Minadous, contends against these, *de Virulen. Vener. Cap. 39.* And first of al he writes that he never observed, that Physicians commanded the decoction to be taken without sweating, to which al Alexipharmacal things of their own Nature do incline men, neither is the matter it self unfit to be expeld this way, being Vaporous and halituous: neither was there ever any one, who did throughly and wholly overcome this disease without the help of some sweating, especially if it were inveterate; but why he holds thus, he brings this reason, That in his opinion, the essence of this evil doth not consist in a quality, but in the body affected

affected with an evil quality : and therefore he holds, as a quality doth indicate alteration, so a body indicates Evacuation, which though it may be many waies, yet most commodiously by sweating : whenas this very thing is a Vaporous body, and is most rightly and easily discussed by sweat ; and he adds this, whenas there is a great quantity of Excrements abounding in those bodies infected with this disease, not only in one part, but al over the body ; but sweat is an universal Evacuation, they are most commodiously emptied by sweating : and he holds that sweats do very much profit the Liver especially. For whenas that is the Forge of Humors, which are carried through the whol body, and they are purged by the benefit of sweat, and freed from al defilements, also the Liver polluted may be this way cleansed, and though Nature sometimes do empty the virulent humors by some other part, as by stool, or by Urine, and then her endeavor is not to be hindered, but to be helped forward ; yet he holds that without sweating the whol body cannot be freed from that Disease, and he thinks that sweat only can empty from al places both internal, and external, quickly, safely, and pleasantly.

The decision But neither of these opinions doth fully reach the Truth, and both delivers an imperfect Cure. For whenas the Curative indication so called in general, is twofold; the one preservative, which is taken from the cause; the other in specey called Curative, which is taken from the Disease ; they who think this disease may be cured without sweat, because it consists in a certain hidden and Malignant quality, think right concerning the curative indication, whenas that malignant quality cannot be taken away by sweating, or other Evacuations, but by proper Alexipharmaca, yet they neglect the preservative indication, and the cause : for whenas it is certain, that in the Veneral disease, there is not only a vicious disposition, and Malignant, in the parts, especially the Liver, but that al the Humors of the Body are corrupted ; there is required then an Evacuation of them, which is most commodiously done by sweating, as *Minadous* rightly proves. For though something be discussed insensibly, yet that insensible Evacuation is not sufficient, and 'tis too slow. But *Aurelius Minadous*, thinks wel concerning the taking away of the Cause, and the Evacuation of vicious Humors, which is most rightly done by sweating ; but he neglects the disease it self, or that Malignant quality, imprinted not only on the Humors, but also on the Living parts : from which it appears, which is diligently to be taken notice of, that the dispute of occult diseases, is not amongst those which *Galen* calls Logical, but does conceive the very essence of these diseases, and that the ignorance of the occult diseases, doth not only breed Errors in theory, but also in practice. Therefore though we do grant, that the Evacuation of Humors is wel ordered by sweating, yet Alexipharmaca are necessary also, against that malignant disposition in the parts, especially in the Liver, and *Fernelius*, whom *Palmarius* follows, for this very cause do add peculiar Alexipharmaca, as shal be said, that that Malignant disposition may be pulled up by the Routs. For though al the vicious Humors be emptied, and al other diseases and Symptomes do cease after their emptying ; yet unless that Malignant disposition be taken out of the parts, the evil grows fresh again, and oftentimes a long while after. And this I think is the cause, that not only the decoction of Pockwood, Sarsaparilla, and the like, is given in the morning to provoke sweat, but also without sweating is taken as common drink ; for the very same proper Medicines, which do destroy the occult cause and malignity in the humors, and do empty the vicious humors by sweat, are able also to Eradicate the disposition imprinted in the parts.

Last, of al this must not be past over, that the indications proposed before, are not necessary to be observed in every French disease, but only in that, which hath almost invaded the whol body, and especially hath possessed the Liver. But if the evil be new, there is no need either to let blood, or to give purges, whenas the fault is not yet communicated to the humors, but it is enough to wipe off, or cal forth the contagion received, which also is sufficient in the scab newly contracted by contagion, where yet we must observe, whether those pustles, and French rottenness, as they

Chap. II. *Of the preparation, and purging of vitious humors.* 31

they call it, do immediately proceed from contagion, and whorish copulation, for then external medicines do suffice, or whether they do arise from the Liver now affected, for then there is need of evacuations and alexipharmaca.

Chap. X.

Of the Cure. And first of bleeding.

First of all therefore as concerning indication preservative, or the removing of the causes, and bleeding at the beginning; truly the cause of this disease properly and next of all is not taken away by letting of blood; yet if blood do abound in the body, and that especially be too hot, the proper remedies of this disease, which are hot and dry, cannot be safely administered unless the abounding blood be first diminished.

And truly if the virulent matter have no peculiar motion to any part, the basilick veine may first of all be opened: but if the matter have motion to some particular part, as to the groin, and nature thrust forth a bubo, bleeding is warily to be used: for if the bubo tend to suppuration, we must not let blood, and especially in the Arme, lest nature be troubled in her expulsion, and the matter be recalled to the inward parts. And it hath been observed, that many from the bubo opened, and the matter a long while emptied by it, have become perfectly sound; on the contrary from unseasonable bleeding, the evil hath been prolonged; therefore in bleeding we must attend the motion of nature, and when the tumor doth not afford hopes of suppuration, a veine must be opened in the lower parts, for so the matter is retracted towards the lower parts, and by reason of the efflux of hot blood, 'tis afterwards more easily suppurated. After the same manner a veine is to be opened in the yard, if there be rottenness in the privities, or a running of the Reines, and wholly if the parts below the Liver be affected: but if the matter rush to the head, and there cause most vehement pains, filthy ulcers, falling of the haire, the cephalick veine in the Arme is most commonly opened.

The other precepts which are propounded in general concerning the right administration in bleeding, are here also to be observed; which whenas they are not proper to this affect, we shall no further propose them here.

If the strength will not beare bleeding, instead thereof the hemorrhoidal veines of the Arse, may be opened, or Cupping-glasses be applied in convenient places.

Chap. XI

Of the preparation, and purging of vitious humors.

Next of all if the body be cacochymical, the vitious humors must be emptied and prepared with convenient medicaments; whenas in an impure body alexipharmacal meanes, and proper remedies of this disease, do profit little, nay they may bring hurt, and though that disease be overcome, may render the body obnoxious to other diseases. For vitious humors collected about the bowels cannot all be discussed and dissipated by sweat, but the thinner part being discussed the thicker is left, and grows dry, and is fastened in the bowels, and oftentimes contracting an acrimony, doth weaken the substance of the vessels: from whence that disease grows sometimes more stubborn to cure, and there arise obstructions of the Liver and Spleen, and schirrous tumors, hypochondriacal diseases, and creeping ulcers.

Not yet is purging only to be used in the beginning, and before the proper cure of the disease, but also the whole time of the cure, if vitious matter be collected again,

Preparation and purging of humors.

'tis

'tis to be emptied by intervals: yet if the evil be now inveterate, and stick principally in the external parts, the vicious matter is not rashly to be recalled to the inward parts by strong purgers, least the Liver, Stomach, and other bowels be hurt and weakned, but 'tis to be emptied by convenient places, where nature tends.

But concerning the preparation and purging of humors, though many Authors are large enough, yet whenas those things which are spoke by them, concerning an universal preparation and purging of humors, are not proper to this disease, but are common to al depending on a cacochymy: it seems not worth our labor, to dwell upon those generals, which are already known by the cure of many other diseases. We shal only admonish you of these things; first of al when the disease is new, we must observe, what vicious humors abound in the body, and especially in the second region, and those must be prepared and emptied. But if the evil be now inveterate, because in that for the most part, thick and adust humors are collected, the medicines are first of al to be directed against them. Next of al this is to be observed, that we have respect also to the distemper of the bowels, and if they have contracted any distemper, that must be corrected, and they must be strengthened with proper medicaments. Thirdly, it is necessary, that we alwaies ad somewhat to our preparatives and purgers, which doth resist the Veneral virulency by a specifick faculty; and therefore concerning common purging medicines we wilad nothing, whenas they are every where obvious and known, but this that many physicians do testify, That Mechoacan, to which belongs Jallop, is given not only for its purging faculty with benefit in this disease, but also because 'tis an enemy to this evil by a peculiar power, so that it is numbered by some amongst the antidotes of this disease. Then by the Chymists mercury prepared is che ifly commended for the curing and purging of this disease, of which shal be spoken hereafter in particular.

Chap. XII.

Of the proper remedies and antidotes and alexipharmaca of the Veneral Disease in general.

After the body is emptied in convenient manner, the greatest hopes of this cure is in the proper antidotes of this disease, as from which only perfect health can be hoped for so indeed, that though divers other diseases, arising from the corruption of humors, be often joined with this disease; yet if that malignity be taken away, a little while after either they vanish of their own accord, or are easily cured, but without the help of these remedies, no perfect cure can be hoped for by other medicines, under what name soever: and this too is observed by many that these kind of medicaments though by their manifest qualities they seem to be adversaries to a hot and dry distemper, yet these hot and dry medicaments have been used with most happy success by many who were endewed with a hot and dry distemper of the Liver, nay of the whol body, and who had a leane habit of body, nay were almost plainly consumptive, from which very thing appeares, that in this disease, we ought rather to take care of the occult malignity, than of the manifest distemper. And therefore as soon as the body is in some sort prepared and emptied, we must maturely hasten to those Alexipharmaca of the Veneral disease.

But though some Physicians would advance and extol the vertues of those medicaments which shal presently be reckoned up, whiles they hold, that the decoction of Juniper wood, of the Olive tree, Box, Beech, and other trees may performe the same, as the decoction of Guajacum, so that a most slender course of dyet be used, as is wont to be observed with the decoction of Pock-wood: yet experience hath long since taught that that is false: for though it be certain that by a most slender diet some symptomes of this disease do grow more gentle, yet unless proper remedies be administred, a little while after the disease is seen to grow fresh again, and returne

Alexipharmaca of the Veneral disease are necessary.

return more cruel: for such medicines indeed with a slender diet, may consume the vitious humors, but they cannot overcome the malignity: as therefore this disease is occult, and is not known but by its effects, so also the remedies which cure this disease, are not found out by reason, but only by experience.

But what those medicaments are, Physicians again do not fully agree. Many put their greatest hopes in Quicksilver, and think that the only and proper Alexipharmacum of the Veneral disease; others do wholly reject it, of which business shall be spoke hereafter. Others, and most men indeed, undertake the cure of this disease with the use of Guajacum, Sarsaparilla, China root, Sassafras wood; and others doubt of these very things, nay some deny that this disease can be overcome by the use of Guajacum only and the like, and therefore they think their vertue ought to be quickned and increased by the mixture of other things. *Jul. Palmarius lib. de lue Vener. cap. 13.* distinguisheth and thinks that Guajacum is not of so great force that that alone can wholly extinguish the root, and all the deadliness of the veneral poyson; neither that it is so weak, that it can do nothing without the help and conjunction of other things; he writes indeed that by the use of that alone, the humors being consumed, all the symptoms of the disease will at length be allayed, and wholly lie hid, but yet the virulent taint of the disease, which is already in the solid parts, is not overcome, and wholly extinguished in most people by that remedy; but that the deadliness of the latent poyson be wholly extinguished, and that the return of the disease be prevented, he thinks other alexipharmaca ought to be administered, which opinion doubtless he received from his Master *Fernelius*, for he writes that he, as in *lib. 1. de lue Vener. cap. 7.* did first dare to promise a perfect cure of the French Disease without the use of Quick-silver, and that he took care for the Composition of many Alexipharmaca at his House, which he gave against this poyson with Guajacum, and sometimes without it, and as he writes in the alleaged *Cap. 7.* two of these medicines which he found to be most excellent and efficacious, he by the addition of other medicines hath reduced into one, which hitherto never failed any man.

What they are.

But whenas these medicaments are compounded of common Alexipharmaca not proper to this disease, we shall not propose them in the first place, but hereafter we shall speak somewhat of them. But in the first place, we shall treat of those things which most Physicians have hitherto used, and which long experience hath now confirmed to be alexipharmaca of this disease, by the use of which it hath been a long time observed, that not only the vitious humors have been emptied, and the symptoms destroyed; but the very roots of the disease have been pulled up, that it could no more returne. Of which sort are your pock-wood, sarsaparilla, China root, Sassafras-wood, of which we will now speak.

Chap. XIII.

Of the Indian Wood, and Guajacum.

And first of all we will treat of the Indian wood, as being that which challengeth the cheife place amongst the remedies of this disease. For whenas this disease is reported to be endemious in the *Indies*, the cheife remedy is also fetcht from thence, which they call the Indian wood; but this sort of wood, as appeares by *Consalvus Oviedus* a noble Spaniard, who writes of things in the *Indies*, is two fold; the one which is commonly known, called Guajacum, the other which is called the holy-wood. For though by many these two woods are taken for one and the same, yet the forementioned Author, doth distinguish them both by their marks and places, concerning which see *Fallopious de morb. Gal. cap. 39.* yet whenas both woods have the same force to overcome the French disease, (though it be reported that the holy-wood be of greater force against articular diseases, and others, and the holy wood is now a days seldom brought over to us) we shall only speak of Guajacum.

The Indian wood.

Two fold. Guajacum.

The holy wood.

A mongst other new Islands found out in former Ages, there is one also, which the Spaniards the discoverers have called by the name of *Hispaniola*: whenas the Veneral disease was reported to be indemious there, and the decoction of a certain wood is esteemed there the only remedy of that disease, which at this day is called *guajacum*, & by the inhabitants is pronounced with gaping *Huajacum*. The Spaniards infected with the same disease, having found the same decoction to be helpful, did afterwards discover its vertue to others: the tree is reported to be leaved like ash, the color of the wood within is blackish, the wood it self is heavy and ponderous, it floates not in water, but sinks; 'tis full of rozin, and while it burnes, it sends forth no ingrateful scent, its tast is somewhat bitter, with a light accrimony, pricking the tongue.

*The Choice
of Guaja-
cum.*

There is some doubt amongst physicians concerning the choice of it; some are of opinion, that which is whitish, is to be preferred before the rest; whenas by how much the lesser 'tis in years, by so much the whiter it is, but the older it is, by so much the blacker it is: but that which is older is dryer, and that which is yonger is more moist, and more abounding with juyce, and therefore more powerful. But indeed whenas there is a two fold humor in living things, the one primogenious, the subject of innate heate, or the implanted spirit, apt to take fire; the other alimentary, more watrish, and less apt to be set on fire: the vertues of this wood, as also of other plants, are not to be judged from the alimentary and more watrish humor, but from that implanted heat, and primogenious humidity; which whenas in its tender age, both in infants, and in plants, 'tis overwhelmed and obscured by much moisture, many actions in that age are infirm and weak, which afterwards that moisture being somewhat wasted, and the heat become more vigorous, in progress of time they become more strong, and this heat the cheif instrument of all actions is wont to consist unchanged til it comes to its full age, and heighth: and therefore though the same innate heat and radical moisture be alwaies in *Guajacum*, on which its vertues do depend, yet because in the yong and tender wood, that vertue is as it were over whelmed, and restrained by the abundance of moisture, that wood which is the yonger is less efficacious, than that which is now of a full confirmed growth: and therefore for the cure of this disease, we must not chuse that wood which is yellowish, or that is of a box colour, or that which is cut of a tree not full grown, or from the boughs, as being less efficacious; but rather that which is somewhat black, because that is more rozin, and abounds with that fat and balsomy substance, in which doth chiefly reside that vertue opposite to veneral virulency. It is good therefore to know the age of this wood, that we may choose the most effectual. For that indeed which hath the inward part black, and is long waies divided with clefts as it were with certain lines of a duskyish colour, gathered into blackish rounds, that is efficacious, but yet 'tis such as is cut off either from the arms of trees, or certainly hath not yet attained its full maturity, and therefore 'tis of less efficacy: for those kind of Lines do therefore appeare because that fatty substance, which doth chiefly reside in the middle trunk of the tree, is not yet so plentiful, as to fill up all the internal parts of the wood: but that which is black all over the internal parts, the superficies only being whitish, that if it be sound, weighty, and odorous, and prick the tongue with a light accrimony, and either is not divided with any lines, or else with those full of rozin, and therefore while it burnes besides the grateful smell it sends forth, it also yeelds a blackish rozin that hath attained the highest degree of maturity, and is cut off from the body of the tree, and is therefore most effectual, but if it be divided with lines, and full of holes, and neither weighty, nor odorous, nor acrimonious, and being lighted yeelds no rozin, it is a sign that that is now old, and therefore its vertues are grown dull.

*How the
age of this
wood is to
be discerned*

L. Septalius also doth admonish us here, that there is a certain sort of *Guajacum*, which is never to be brought into use, which hath no true blackness in the middle of it, but is of a somewhat darke and greenish colour, which makes the decoction very thick, that it wil never be cleare, and by its exceeding accrimony, it causeth a heat both

both in the throat and jaws, and by reason of its thick and earthy parts, for the most part it causeth obstructions in the spleen, sometimes also in the liver, Empiricks call it the wild holy wood: but whereas he finds no where in Authors this twofold difference of domestick, and wild; he rather thinks it acquires these qualities from the nature of the soil.

Also if the barke be thick, and cleave so to the wood, that it can scarce be pulled and parted from it, the wood is good: but if the Bark be easily separated from the wood, either 'tis old, or perisht by salt water: also if the wood appear fatty whiles it is rasped, and that being masticated doth bite, and leave a bitterness behind it; and whiles it is cut, it appeare solid with an even superficies, not rough and full of holes, the wood is good.

The Bark of this wood is endowed with great acrimony and bitterness, and therefore dries, attenuates, and digests more powerfully than the wood; but because that occult vertue which is opposite to this disease, is rather in that fatty and moist, and balsamical substance, the wood is alwaies preferred before the bark; and besides the bark is not so conveniently given in hot and dry bodies.

As concerning the vertues of Guajacum, it is hot and dry, as may be perceived from its taste, smell, and acrimony, and that in the second degree, and 'tis also of thin parts, whence it hath power to attenuate crasse things, to cut and cleanse clammy humors, to open obstructions, to move sweat and urine, and to dissipate and waste superfluous cold humors: but this pockwood is not chiefly given for those qualities (whenas there are found in Europe medicaments endowed with those qualities, that there was no need to transport them out of the Indies) but principally for that peculiar and occult power. By which it is opposed to the Veneral virulency: and truly all physicians almost doe agree that pockwood doth deserve the first place amongst the alexipharmaca of the veneral disease: for though Fernelius would somewhat lessen its vertue, because all that are affected with this disease are not cured by the use of it, yet this is no sufficient cause, since there is found no such alexipharmacum, or other medicine which can cure diseases past hope. But this wood is by an occult quality and propriety opposite to the Veneral virulency it self, and is a friend to the radical moisture, and natural balsom, which doth most of all suffer by this virulency inimicus to the nutritive faculty; and doth so strengthen it, that it hath been observed, that those also, who had a liver, and whole habit of body hot and dry, and who have been almost consumed with the veneral disease, as was said before, by the use of the decoction of this wood, though by its heat and dryness adverse to them have been restored, and become better habited and more corpulent. Some indeed have dared to write, that the decoction of this wood doth nourish as much as chicken broath: but these seem to me, to be excessive in the praise of this wood: for though it be a vegetable, and perhaps may leave some alimental juyce in the decoction, yet I think no body that is in his right mind will easily deny, that a chicken hath not more convenient nourishment for a man, than Guajacum, but that some after this disease become more corpulent, is accidental; for whenas by reason of the Veneral virulency nutrition was hurt in the whole body, when that is discussed and extinguished, the body begins again to be nourished well, and to be augmented: the like of which happens also in some other diseases, especially in fevers, before which whenas men were not well fleshed by reason of evil nourishment, the vitious humors being wasted by the disease afterwards they begin to be nourished well, and become more corpulent.

Fr. Arcæus also lib. de curand. vulner. rat. gives the † Decoction of Guajacum for ulcers of the Lungs, and the pricks; and he writes, that bodies, though they be wasted, are not offended by it, but rather grow fat upon it: nay there are some, who attribute a nutritive power to Guajacum, and write that it is no less nourishing than chicken broath. The same vertues also others do attribute, * to Sarsaparilla, Sassafras, and especially to China root, but indeed though it be found by experience, that in

The bark of
Guajacum.

The vertues
of Guaja-
cum.

Whether
pock-wood
do nourish.

† whether the
decoction of

Guajacum, sarsa-
parilla, sassa-
fras China
root, do fatten.

* The decocti-
on of Guaja-
cum, sarsa,

sassafras, Chi-
na root, nourish
not but by
accident

the prifick, Veneral difeafe, ſcab and other difeaſes, bodies extenuated, have been reſtored again, and made fat by the uſe of theſe decoctions, yet this comes to paſs not of it ſelf, becauſe theſe decoctions have a nutritive faculty, as other nourishments, but by accident, in as much as they take away the cauſe of leaneſs. In prifick bodies the caſe is plain; for whenas that waſting of the body proceeds from an ulcer of the Lungs, the ulcer being dried up by the uſe of Guajacum, the body begins to be wel nourifht again: the ſame happens in other difeaſes, as the French, the Scab, and the like. For whenas that leaneſs, and conſumption doth proceed from bad nourifhment, but bad nourifhment for the moſt part from acrid and ſalt humors, which do both conſume the good blood, and hinder the agglutination of it to the body, thoſe vitious humors being waſted by the decoctions, and diſcuſſed by ſweats, the bodies begin to be nourifht wel again, nay grow fat.

But this wood hath not only an alterative power, and by its occult quality to extinguiſh that malignity of the Veneral virulency, imprinted both on the humors, and the ſolid parts, but alſo to evacuate, both ſenſibly by ſweating, and inſenſibly by inſenſible tranſpiration: and therefore the way of curing the French difeafe by Guajacum, and medicines of affinity with that is moſt in uſe. For though by reaſon of the length of the cure, and the pains of ſweating, and the ſlender dyet, it cauſe ſome trouble to them: yet it is far ſafer than that way, which is by quickſilver, where if there be an error, the patient is in no ſmal danger.

*Medicines
made out of
Guajacum.*

But there are prepared out of Guajacum divers medicaments, and thoſe either in a liquid forme, or in a ſolid, and in ſubſtance: but thoſe given in a liquid forme, are moſt effectual, whenas they are eaſily deduced into act and penetrate into the whol body, and do irritate the expulſive faculty of al parts to caſt off what is hurtful: but in a ſolid forme, whenas that part in which the vertue of the medicine doth cheifly reſide, is not yet ſeparated from the earthy and thick part, tis not ſo eaſily deduced into act. The decoction therefore as moſt convenient is moſt in uſe: yet if any by reaſon of the continued uſe of this medicine be weary of it, and nevertheless do feare leaſt there be ſome reliques of the evil humor remaining, or their courſe of life wil no longer admit of the uſe of the decoction as it ought to be taken, to ſuch, medicines made out of this wood, may be given in another form. Amongſt which extracts and ſpirits, as ſhal be ſaid, are moſt efficacious, and far more excellent than pouders.

*The man-
ner of pre-
paring a de-
coction of
the wood.*

*Whether
it ought to
be boyled in
Wine.*

But the manner of boyling this wood is various, both in reſpect of the liquor in which the decoction is made, and of the quality of the liquor: for ſome boyl the wood in water, ſome in Barly water, ſome in diſtilled waters, others in wine, others in Whey, and others in broth of Fleſh. L. Septalius lib. 7. adnimadu. nu. 204. reprehends thoſe who deny, that the decoction of this wood may be made in wine only, whenas nothing is more fit to extract the faculties of medicines, than wine, and the water of wine (he had ſpoke righter than the ſpirit of wine) and therefore he prepares his decoction with wine, which he uſeth when the difeafe is inveterate with an evil habit of body, and a cold matter predominant: after this manner eight ounces of the bark of the beſt holy wood groſſely poudered being infuſed in forty two phyſical pints of the beſt white wine, for two days, the wine being firſt heated and alwaies kept hot thoſe two days in a double veſſel, or in the aſhes; afterwards with a ſlow fire boyl it away in a double veſſel, to the conſumption of the third part, which let the ſick make uſe of, both in the morning inſtead of a ſyrup, and for his drink at meales, let him take in the morning ſeven ounces, & an hour after move ſweat: but at dinner, and ſupper let him not exceed fourteen ounces. But though we grant that wine is moſt commodious to extract the vertues of vegetables, yet this cannot be denied that by boyling the ſtrength of wine doth vaniſh, and when the ſpirit is exhale, there is left a nauſeous phlegme leſs profitable than plain ſimple water. And therefore I am of that opinion that either the wood is to be boyled in water, and towards the end, the wine is to be added, or elſe the wood

is only to be a long while infused in wine, or to be boyled in a double vessel, that nothing be lost, but by no means to the Consumption of the third part.

Therefore most commonly and rightly the decoction is made in pure water, which doth both a little correct the Heat and driness of the Medicine, and further the distribution, and provocation of sweat, yet if the body, and especially the stomach be cold and weak, and the Patient accustomed to wine, Wine is not unprofitably mixt with it, as was said even now, and shal be said hereafter; for by the admision of Wine the stomach is less hurt, and the vertue of the Medicine doth the easier penetrate to al the parts.

And a different proportion of the wood to the water is observed according to *The proportion of* the age, constitution of the body, and season of the year, and they take to twelve *ti on of* pound of water, from three ounces of the wood to twelve: for if the season of the *wood to the* year and the body be hot, 'tis safest, to take a less quantity of the wood, and in a *water.* longer time to perfect the Cure, than by too strong a Medicine to damne the patient, especially at the beginning of the cure, and before the superfluous Humors in the body be abated, and sweat begin to flow easily and exquisitely, and the patient be accustomed to the Decoction, afterwards by degrees you may take more of the Wood, which unless it be observed, the Patient is easily brought into danger. And *Eustachius Rudius* writes, *Lib. 5. de Morb. occult. Cap. 13.* That he hath seen patients who by this error, viz. too great a quantity of the wood given on the first daies, have fallen into a Feaver, that afterwards they have been forced to abstaine from the use of the decoction, to their great detriment: but where there is no such thing to be feared, in those of ripe years, we commonly add to one pound of the wood rasped or turned smal, twelve pound of water, in an earthen Vessel glased, and let it infuse twenty four hours in a warm place, afterwards the vessel being wel covered boyle it with a gentle fire, til half, or the third part remain, and let the decoction cool in this vessel stil covered, afterwards strain it.

Fallopious Lib. de morb. Galli. cap. 46. disputes whether it be better to boyle it with an open fire, or in a double vessel as was said, or in Balneo Mariae, and reprehends them who hold that the decoction made in Balneo is more dilute, or less powerful: and that the decoction made in Balneo, is more excellent than that which is made with an open fire, he endeavors to prove by the example of distilled waters, which by the balneum are made most excellent, when as there is no adustion in them, but the greater eliquation which is made in that hot and moist, doth render the decoction more excellent; but experience teacheth otherwise, which reason also doth confirme. For though out of some moister plants, as Roses, Violets, Lilly of the vallies, and the like, being fresh, whose vertue consists in the volatile part, as the Chymists speak, the best waters are made in balneo without the affusion of water: yet in hotter plants, especially in Roots and woods, whose vertue consists in the oily part, their vertue can never be extracted by the too gentle heat of a Balneum, as happens also in many seeds, but they must be distilled by a † Vesica through which by the vehicle of the water, those more fixed parts may be elevated: when as then the whol vertue of Guajacum doth consist in that oily and rozeny part, and there is need of strong boyling that that may be extracted, the gentle heat of a Balneum cannot do it, but it must be boyled in an open fire, which nevertheless causeth no adustion, if there be added a sufficient quantity of water.

Some for the better gust, and that the bitterness and acrimony may be abated, a little before 'tis boyled enough add of Raisin and Liquorish, of each one ounce; and you may add Sugar, or some Julep to rellish it, *Aurelius Minadours, de virulen. Vener. Cap. 4.* holds the Decoction ought chiefly to be Dulcorated with Honey;

After what manner 'tis to be boyled.

A chymical Vessel.

Honey; for he thinks that a smal quantity of Honey, if it be boyled with it and Skimmed, wil rebate al the bitterness, and the Decoction acquire a greater power to cleanse, attenuate, open, and make fusil the Humors, and strengthen the parts: which we grant may take place in phlegmatick bodies, and especially in a cold stomach; so whenas honey doth easily turn to Choller, we think it cannot safely be used, in chollerick bodies, hot and dry; but more conveniently and safely Raisons, Liquorish, or Sugar.

Some also in those who have a hot and dry Liver, do add towards the end of the decoction a root or two of Succory, one or two handfuls of Endive, Sowthistle: but whenas such decoctions are to be continued along while, we must have a care least by the admistion of such things they be made ingrateful, and provoke nauseousness in the Patient: besides whenas for the most part there is boyled at one time Decoction enough for many daies, but the addition of such Herbs doth cause, that the Decoction wil not last so long, to prevent this, such herbs are to be added not to the whol decoction, but to about one pound of it.

Some not unprofitably, especially to those accustomed to it, and whose stomach is weak, do add towards the end of the decoction three pound of a sweetish white wine; some prepare the whol decoction in wine, but not so rightly: for the best part of the wine doth evaporate in boyling, and there is left an ingrateful Flegm as was said before.

Aurelius Minadous, also doth admonish, that the decoction of the wood is to be given with a vehicle, which may direct the vertue of the Medicine to the parts principally affected; and the Head most of al affected we must mix Cephalick things; the Reins affected, things Nephritical; the Liver, Hepatical; the Spleen, things Splenitick. Which as we do not wholly disallow of, so we do not alwaies think it necessary, whenas the vertue of the decoction doth easily of it self penetrate into the whol body: but we must chiefly have a care, least by the admistion of such Medicines, the decoction be rendered nauseous and ingrateful to the Patient; which when he himself also considers, he admonisheth rightly, that such Medicines are more commodiously taken by themselves reduced into a pouder, or Bolus, or some other forme, than mixt with the decoction; but we shal speak hereafter of compound decoctions.

Distilled water from Guajaum. The Chymists whenas they fear least by the long boyling, which is to the half, or a third part, the Spirituous and subtile parts should exhale and be dissipated, and so the vertue of the Medicine be diminished, prepare this decoction another way, so that it loseth nothing of its strength, they take the pouder of Guajacum and put it into a retort, and pouring a sufficient quantity of water, they place the retort in the ashes, and apply the receiving vessel, and making a fire under it, first they make a digestion, then distil it, to the Consumption of one half of the water they give of the distilled water four ounces; yet it were most commodious if the distilled water were mixed with the rest of the decoction in the retort being strained; for so they would have al the vertue; to that decoction remaining in the retort may be poured more water, and let it digest twelve hours, afterwards distil it; and the liquor distilled may be given for common drink, and whenas it happens sometimes, that Infants are born infected with the Veneral disease, or are infected by their Nurses; this distilled and sweetned with Sugar may be given them instead of Juleps.

The second decoction. Also after that the first decoction prepared the common way, is strained, twelve or eighteen pound of water again is poured to the wood remaining after the first boyling according as the Patient is wont to drink more or less, and is boyled to the Consumption of the third part; and being strained is given for ordinary drink at dinner and supper, if they desire a more pleasant and sweeter drink, you may add four ounces or more of Raysons, or instead of Raysons, one ounce or

two of Coriander seed prepared, and sweeten the decoction with two or three ounces of Sugar.

But if any Herbs have been added to the first decoction, the decoction for drink at meals must not be made of the remainders of the first decoction because it would be nauseous, but you must prepare another fresh decoction, but more dilute, or a wine of Guajacum, which is made thus: Take four or five pound of the wood, four pound of white Sugar, ten pound of white Wine, and put the wood into a wooden Vessel, and heat the Wine and powr it to it.

Wine of Guajacum.

Some boyl the wood the third time, and use the decoction to boyl meat in, the same decoction also may be used to wash the hands, to cleanse the Nostrils, and mundifie Ulcers.

The third decoction.

And some give this wood other waies, some in the form of a powder, others make electuaries of it. Thus *Nicol. Massa. Lib. 2. de Morb. Gal. Cap. 6.* he takes of the Indian wood most finely prepared one pound, and with Syrup of Fumitory boyles it to the form of an Electuary, of which he gives half an ounce or an ounce; or take of the wood of Guajacum, Sarlaparilla, finely powdered, of each one ounce, of the species of the three saunders and Diarrhodon Abbatis, of each two drams; Conserve of Succory, Roses, of each six ounces; with Syrup of Succory make an Electuary.

An Electuary of Guajacum.

Others with a convenient Syrup make pills of it.

But others not without cause do here admonish us, that such Medicines are less effectual, and that many, who were newly infected, when as they hoped for health by the use of such Medicaments, by that delay and lingring and weakness of the Medicine have fallen into a most grievous evil: for as was said, such Medicines do less penetrate into the body. Yet towards the latter end of the Cure, when the evil is almost overcome, and 'tis only feared, that there may remain some evil disposition, and the long continued drinking of the decoction of the wood is nauseous to the patient, such Medicines may be used to consume the reliques of the disease.

An extract of this wood is more commodiously prepared, and out of that pills, or rowles: but after the use of it there is need of taking some liquor, by whose vehicle the extract may be distributed and carried into the whol body: nay these extracts, according to the opinion of *Hercules Saxonia*, have scarce so great strength as to overcome this disease if it be very great and ancient, but the decoction is deservedly preferred before them.

An extract of Guajacum.

Hercules Saxonia de lue Vener. cap. 27. writes that the oyl is stronger, and he thinks the whol Alexipharmacal power of the wood is placed in this Oyl, and he relates that he hath proved by experience, that by the benefit of this oyl; the greatest and ancientest disease hath been overcome. But he gives it divers waies, in wasted bodies with milk, in others of a hotter temperament, with Conserve of Roses, or whey of Goats; in Melancholly with conserve of Burrage or Bugloss, in Flegmatick with Conserve of Berony, in those that have knobs with Turpentine, and two scruples for a dose. But doubtless it was not oyl which *Saxonia* gave, but a liquid extract or Tincture as they cal it. For no oyl is distilled from this wood by an Alembick: but that which is distilled by a retort, or descent by an open fire, is found to be such, that it cannot conveniently be given into the body, nay scarce with safety.

The oyl of Guajacum.

Attribute more to the spirit of Guajacum, the preparation of which is not every bodies work, for it requires a longer and more diligent digestion and fermentation for the preparing of it.

The spirit of Guajacum.

There are some also who think, the leaves and fruit of this tree being reduced into Conserves and Electuaries are to be used, and they relate, that the Indians infected with this disease, do use them as Medicines; but though the leaves and fruit may do somewhat in a light disease, yet they are not sufficient in that which is

great

great and inveterate, neither are they able to perform what the wood doth. But 'tis observed that the fruit of this Tree hath also a power vehemently to loosen the Belly; and whenas a fresh and light disease is sometimes cured only with purges, 'tis no wonder that the Indians may be cured by these purging fruits; especial since that al Alexipharmacal vertue against this disease cannot be denied them.

CHAP. XIV.

Of Sarsaparilla.

Sarsaparilla. **N**Ext to Guajacum, that Root challengeth the first place in curing the Venereal disease, which some call Spartam Parillam, some Salsam Parillam; the Spaniards Sarsam Parillam, by reason of the similitude which it hath with the plant called rough bindweed. By reason of its thornes 'tis called Sarfa, (for Sarfa in Spanish signifies Bryers or Brambles) but by reason of its leaves, and boughs, Parilla, that is to say the thorny vine. Nay *Fallopins de Morb. Galli. Cap. 63.* is of that opinion, that it is truly the rough bindweed, which grows every where in Italy, and he writes that by the use of it, he hath with happy success freed many from the French Pox. *Dioscorides* also *Lib. 4. Cap. 139.* writes thus of the rough bindweed, its leaves and fruit being drank before, and after, are antidotes against deadly poysons; and besides 'tis delivered that if somewhat of them powdered be given to a new born infant to drink, no poyson shal afterwards hurt it. But grant it be so, that the Italian rough bindweed can do somewhat against this disease, as also against other poysons, yet he himself grants, that there is no light difference betwixt this and the Indian.

The native place of sarsaparilla. But Sarsaparilla grows in Peru, in the hedges, as rough bindweed, the white and black Bryony, and hops do in Europe. The Root creeps far up and down by the Earth, that 'tis oftentimes above six cubits long, which gathered into bundles is brought over to us. The good and fresh is white, solid, but that which is reddish, and poudery when 'tis broke, is less effectual.

The vertue of it. Its vertue as I have said is very great also in curing this disease, and 'tis found by experience, that many have been cured by the use of it, without Guajacum, and because 'tis more Temperate; and moderately hot, and without any acrimony, bitterness, or astringency, or smel, but hath a certain obscure sweetness, it may safely be given to al constitutions of body, and al Ages; besides 'tis of thin parts, provokes sweat, dries eminently, resists putrefaction, waists superfluous humidity, somewhat loosneth the body, and therefore is wont in some sort to weaken the stomach; but though Guajacum be more powerful and efficacious, yet Sarfa in this exceeds that wood, that it hath an eminent power to allay the French pains, though never so accute and stubborn, by reason of its exceeding tenuity, penetrating and laxative vertue: and *Jul. Palmarius* writes, that no pain can happen so contumacious and so continual, which at length it doth not lay asleep and overcome, if any one use the decoction of it for a long time and constantly. Nay al knotty French Tumors so they be not bony, in what part soever they are, are Rooted out by the use of it, their matter being melted and cast forth by sweats, or at the least wasted and emptied by insensible perspiration: and *Fallopins* writes in the alleaged place, that if after the disease is overcome there remain Ulcers, Clefts about the Arsehole, that Sarsaparilla will heal them sooner by half than the Indian wood, and in a short time also the most hard knobs are dissolved by it. Yet some admonish here, that by Guajacum indeed this disease may be perfectly cured, and that al things are found in Guajacum, which are necessary for the cure of this disease, but that sarfa doth not alone, but mixt with Guajacum,

Guajacum, China Root, and Sassafras wood cure this disease; and for this reason, because it loosens the stomach, heats less, is void of all acrimony, and therefore is not so absterfiv, and being inodorous, hath not the power to refresh the spirits. But these accusations fetcht from the manifest qualities, seem not to be sufficient; truly that Guajacum doth challenge the first place in this disease, is not to be denied; in the interim it hath been observed also by many, that sometimes this disease hath been cured by the use of this Root only; and if perhaps it do to much lax the stomach, that may easily be prevented.

But this also is given divers waies, for the most part as Guajacum in the decoction concerning which we must note, they that wil not spare for cost and desire the decoction should be more effectual, they ought to take only the bark, as which is the more effectual part of the Root, and to cast away the inner piths as that which is less effectual, nay as 'tis delivered by some 'tis more cold, and hath a certain astringent faculty. *The manner of giving it.*

But the Root of Sarsaparilla is taken being sliced thin and to one ounce of it is poured two pound of water, or to two ounces and an half of the Root four pound of Water; some pour to four ounces of the Root seven pound of Water, others to three ounces; ten pound of water. Neither can the quantity of the water to the Root be so strictly prescribed, but it may be varied according to the Nature of the disease, and the condition of the sick, and the season of the year. For in an inveterate disease there is need of a stronger decoction, in a new, of a weaker. But it is steeped first of all fifteen hours or twenty, and afterwards boyled to the Consumption of one half; and reasons, liquorish and other things are added to the decoction, as need requires as in the decoction of Guajacum; and because the decoction of Sarsa doth somewhat lax the stomach, for the most part mint, Betony, or somewhat else that strengthens the stomach is to be added, or what seems more commodious, Guajacum, or least the mixture of divers things may breed nauseousness after the taking of the decoction of Sarsaparilla, they must take somewhat that strengthens the stomach. *The decoction.*

After the first decoction is prepared, fifteen pound of water are poured again to the remainders, and are boyled till a third is wasted, and the decoction is used at dinner and Supper; some also add towards the end of the decoction three pound of Wine; yet this must be done then only as *Fallopins* thinks, either when the sick body goes abroad, to preserve his strength, or when the stomach is weak. *The second decoction.*

Yet there may also be prepared out of this Root, pouders, Electuaries, extracts, as are from Guajacum.

CHAP. XV.

Of China Root.

THe Portugal Merchants brought over in the former Age, from the Country of China root. China, a certain Root for the cure of this disease, which they called China Root; for when as the Venereal disease had invaded that Country also, as the Americans shewed the use of Guajacum for the destroying of this disease, so the people of China used this Root to cure the same disease, and taught others the use of it. But the Root is a handbreadth long, sometimes pretty thick, sometimes thinner, knobbed, somewhat reddish, pretty weighty, which being newly digged up they report is so tender, that it may be eaten raw, and boyled, as turnep and rape Roots are with us; the which seems not to be very credible, whenas our Turneps, Rape Roots dried never attain to so great a hardness: they are brought to us divided.

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As concerning its vertues, 'tis neither strong in smel, nor tast, and therefore there is no excess of it in heat and cold, but 'tis rather temperate, or if there be any excess in it, 'tis rather in cold; yet 'tis dry in the second, of thin substance, yet with a certain astringent power, and a kind of substantial moisture, so that by the use of it men do grow Fat. Whence also the decoction of it doth easily sour. When it was first brought over by the Portugals into France and the neighbouring provinces, it was wonderfully cryed up by the Merchants, as being of thin parts, and having power to digest, to more urine and sweat, to consum Excrements of all sorts, to cleanse the Bowels, free from obstructions, clear the blood from corruption, to take away pains in the Joynts, to be good for the Venereal disease, and because 'tis temperate, it may safely be given to any age, sex; any time of the year, and to those that are feaverish; all which faculties whenas they are not in Guajacum, by some of that time it was made use of not only for the cure of other diseases, but also for the cure of the pox it was preferred before Guajacum. Which very thing caused that Charles the fifth Emperour, being sick of a most grievous Gout, was the first almost that would make tryal of the use of this Root, upon the advice of some Physicians. But experience afterwards lessened that fame; and *Jul. Palmarius* writes of this business *de lue Vener. Cap. 14.* that many to their great detriment have preferred this root before Guajacum, and that he hath found by experience, that also in a very strict diet it hath been uneffectual against this disease, oftentimes also the stomach is seen to become so moist with the use of its decoction, and the Native heat oppressed, that a great Lientery, and crudity hath often followed in those who had but weak Fuel for their implanted heat. Besides these discommodities and faults, he writes also that it doth oftentimes cause swelling of the Spleen and hardness, in those that use it long; neither doth he grant it to have extraordinary vertue against this disease either by its whole substance or occult quality, when as after the use of it, they who thought themselves well, do dayly fall into a relapse of the same Disease. The same also is confirmed by *Gabriel Fallopius Lib. de Morb. Galli. Cap. 60.* who writes that he hath used this Root again and again, for the Cure of this Disease, but could do nothing with it, in the interim he writes that he hath used it with happy success for the dropie, to moderate the mobility of the Humors in hot bleared Eyes, and in a hot distemper of the stomach and Liver. And other Physicians also agree in this, that this Root for the Cure of the French Pox is far inferior to Guajacum and Sarsaparilla, although it be profitable to preserve and strengthen the heat of our body, and therefore for other diseases. And if by chance any one, who could not be cured neither by the decoction of Guajacum nor by the unction of Quick-silver, hath recovered health by the Decoction of China *Jul. Palmarius* thinks this is the Cause of it, because Nature rejoicing in the Variety of Remedies and weary of the stronger, at length is eased by those that are less effectual. Yet *Garzias ab Horto*, relates of the Root being fresh, that it doth so exceedingly heat, that if any one use the pure Decoction of it, or drink it hot, by reason of the too great heat of the Medicine he will fall into exceeding heats of the liver, Erysipilae, and Phlegmons, and other most grievous Symptoms. But when as 'tis brought over to us insipid and sometimes dusty, there is no cause to fear any such thing. Neither doth this only happen in this plant, but also in many others, that the Alimentall juyce hath far other vertues, then the dried Plants: and therefore though perhaps this Root being fresh in China may have great vertue to Cure the Venereal Disease, yet it is not necessary, that it retain the same with us.

The decoction of China.

But divers prepare the decoction of this root diversly, *Jul. Palmarius* writes that the common way of preparing it is this, that to two ounces of the root, cut into rounds, and put in an earthen pot, there is poured four pound of water and let them steep twelve houres; afterwards boyl with a gentle fire to the consumption of the

the one half. *Fallopins* boyles two ounces of the root in twelve pound of water, to the consumption of half, but according to the nature of the disease the proportion of the root and water may be varied: and the root may be boyll'd from one to three in twelve pound of water. Yet *Septalius* adviseth us here, that this decoction is most commodiously prepared, if one ounce of the root fresh and not rotten be boyled in ten pound of water, & two ounces in twelve pound of water. For he writes, though many physitians, to save charges, whenas many cannot take all that decoction in one day, and they feare if they should keep it another day it would grow sowre, do boyl half the portion of China in half the quantity of water, and boyl away the half, or two thirds, thinking that so they have both saved their purse, and prepared the decoction as strong, yet they are very much deceived, and if they have not lost their taste, they shal easily know, that that first decoction is much more powerful, than the second, and the reason is ready, because 'tis not enough to give a proportion of the root to the water, but the time of boyling is chiefly to be considered, and the action of the heat of the fire, and the reaction of the water. For whenas, foure houres space, imagine, ought to be allowed, to extract the vertue out of a most hard root, and communicate it to the water: how much time will be spent in boyling away six or eight pints of water, if taking but the half quantity, viz. half an ounce of China with six pints of water, we suffer the half to wast or two thirds, which will be consumed in less than two houres space, the water being less able to resist the action of the fire? nor let any one dare to say that we may prevent this inconveniency, by making a less quantity of fire, and if it be boyled by a slower fire for to extract this vertue out of a more solid substance, there ought also to concur a due quantity of fire.

Out of the remainders another drink is prepared by some for dinner and supper, as out of Guajacum. Yet *Palmarius* thinks that all the vertue of that root is transfused in the liquor at the first boyling, and therefore for ordinary drink he boyles three ounces more of the root in eight pound of water til two pints are consumed and he ads raitons and liquarish, nay some also drink the first decoction, at dinner and supper, whenas it is not unpleasant to the tast.

The Second
decoction.

Some also do admonish us, that we provide no more of the decoction at once than may be spent in one day, whenas it quickly growes sour when 'tis cold, therefore they command also that it be kept on warm ashes: but experience hath taught us that it will last four dayes. Yet becaule it growes sour, that very thing tels us that this root hath in it, somewhat spirituouse and alimential, which is the cause of fermentation, and hence of acidity.

Consult concerning this with *Amatus Lusitanus* centur. 1. curat. 98. and especially centur. 2. curat. 31.

CHAP. XVI.

Of Sassafras wood.

They use also for the cure of the Veneral disease that wood which is commonly called sassafras, which is imported from the Island called *Florida*: it is of an aromatical taste like fennel: 'tis hot and dry in the second degree, of a thin substance and endewed with an opening, discussive, and attenuating faculty; and therefore is commended by them who have sailed to the Indies, against long tertian feavers, evil habit of the body, and dropsie, and to strengthen the stomach, and against nephritical paines, it is comended also for the gout, to move the courses, and many other diseases, to treat of which is not proper to this place; 'tis used also for the cure of the French pox, yet most physitians agree that 'tis less effectual than Guajacum and sarsaparilla, and the decoction of it is prepared almost as that of Sarsaparilla.

Sassafras
Wood.

Its vertues.

Chap. XVII.

Of Soapwort,

Soapwort.

Last of al soapwort is commended by some physitians for the cure of this disease which is bitter, acrid, and endewed with an absterfiv and opening faculty, and is praised for the French pox and contumacious paines, which cannot be overcome by other remedies. 'Tis reported to be the invention of Zapata a Spanish Empirick: tis used both in the decoction, and in substance, the decoction is prepared after this manner.

Its decoction.

Take of green soapwort two handfuls, infuse them al night in eight pound of water, then boyl it til the soapwort is boyled enough, then strain one pound of it with half a pound of water and the herbs now boyled; and squeeze them, and reserve it for a mornings draught to provoke sweat; taking seven or eight ounces. But that which remains sweeten with raisons or sugar for drink at meales, in summer and Cholerick bodies you may add one handfvl of Sowthistle or basterd Navelwort.

But tis a remedy unpleasing to the tast, Eustachius Rudius takes of soapwort six pugils or more, and infuseth it in twelve pound of water, and boyles it to the consumption of half. But as Septallius hath observed, tis too great a quantity of water to so smal a portion of soapwort.

The powder.

But the Root Cheifly is used in substance, and Rudius doth very much commend it in ancient french pains, and out of it he prepares this powder.

Take of ground pine two ounces; of white dittander one ounce and half; of Zedoary six drams: of the root of soapwort three drams: of pearl prepared half a dram.

Make a powder for 9. doses, but who can take for one dose almost four drams of powder? and the other medicines do far exceed the soapwort, which notwithstanding ought to be the basis.

CHAP. XVIII.

Of Compound Alexipharmaca.

Compound Alexipharmaca in the Veneral disease.

BUt though al the medicines hitherto reckoned up, are good to destroy this disease, yet some are more effectual then others, and besides some have other qualities, for the which they are useful sometimes for this, sometimes for that end, as was said of the simples: and therefore seldom one of these medicines is used, but for the most part, many of them together. Indeed if the disease be simple, and none of the bowels be affected, nor there is no eminent distemper in any part, which may hinder the use of Guajacum, that wood is the most excellent of al, because it resists this disease both by its occult and manifest qualities: but if any disease be joyned with it, tis oftentimes most profitable to add Iarsaparilla and China and there are added by some many altering medicines, of which whenas we spake before, in this place we shal ad nothing of them, but this, that we must have a care lest by the mixture of Succories and endives and cooling medicines which are added to moderate the heat of Guajacum which yet is not to much to be feared, they hinder sweating which is only to be desired, and which brings more benefit, then a little heating can do dammage: next of al least by the admixtion of other things the drink be made ungrateful and nauteous, therefore passing by these that we may speake somewhat of the mixture of alexipharmaca, if the nature of the patient be very hot and dry, and the

the humors violently fall from the head on the lungs, breast or other parts, Guajacum wood is not commodiously given alone, whenas it doth farther heat and dry the parts, and by its heat make the humors run and move, but then sarsaparilla is safer, and China more commodious, which doth at once moderate the heat, and hath an astringent power, by which it stops defluxions: on the contrary if the strength be feeble, and there be a weakness of the sight, sarsa is not commodious, whenas it loosens the stomach, and dulls the sight, if there be a great consumption (if so be it hath not its original from the Venereal disease, for then this disease being taken away as the cause, that wasting also ceaseth, and the body begins to be nourished better.) Guajacum and sarsaparilla are not safe, But then china is far more profitable, as that which moistens substantially, as they speak. Yet *Ludicriptalus* commends Sarsaparilla above all the rest against a consumption, lib. 7. animadv. num. 214. as shall be said also hereafter in the last chapter. So if cruel paines molest the patient, or gummous tumors, or exceeding ulcers be joyned with them, Sarsaparilla is most profitable, which doth dissolve the french knobs, and easier appease the pains, then Guajacum. Thus according to the constitution of the Patients, and the Nature of the Diseases joyned with it, 'tis good sometimes to use Guajacum alone, sometimes Sarsaparilla, sometimes China Root, and sometimes to mix all of them, in a greater or lesser quantity, and sometimes the bark of Guajacum is added, sometimes three or four ounces weight to one pound of the wood, and they are boyled in fifteen pound of water. For examples sake.

Take Of the wood of Guajacum half a pound; of the bark of the same, of sarsaparilla each three ounces: of China root one ounce and half. Infuse them twenty four houres in twelve pound of water, afterwards let them be boyled to the consumption of half, for a sweating drink. Pour on the remainder twelve pound of water, let them stand and infuse eight houres, afterwards boyl them to a consumption of a third part, for drink at meales. Or.

Take of the Wood of Guajacum one pound; the bark of the same, Sarsaparilla of each three ounces. Boyl them in sixteen pound of water, to the consumption of half. Or.

Take of the wood of Guajacum, China root each one ounce and half; Sarsaparilla one ounce; infuse them twenty four hours in six pound of water, afterwards boyl half away. Pour on the residue ten pound of water, boyl it to the consumption of three pound: Strain it and give it for drink at meales. Or,

Take of wood of Guajacum eight ounces; of the bark of the same four ounces; sarsaparilla, saffras wood each two ounces. Boyl them in twelve pound of water to the consumption of two thirds that there remains four pound, towards the end add four pound of wine. Pour to the remainder sixteen pound of water: boyl it to the consumption of half, & towards the end add four pound of wine, make a drink for meales.

In this place we must not omit a question, concerning the use of purgers, whiles the decoction is drank to wit whether they ought to be mixt with the decoction or to be used at the same time with the decoction. For some do wholly reject them, and hold that purgers are neither to be mixed with the decoction, nor to be used apart, for this reason, because the bodies are wont diligently to be purged before they come to the use of these decoctions; next of all because purgers and sweaters do cause contrary motions. Others on the contrary do mix purgers with these decoctions, that by benefit of them the blood may be purified, and the belly constantly kept loose: others do not mix purgers with these decoctions, but purge at certain intervals, every eighth or tenth day, or at a longer distance, as need requires. which last opinion seemes to me to be truest. For though the body be purged before the use of these decoctions, yet some may easily remain, and ever and anon be collected, and sweating doth purge onely the thinner humors, but leaves the thick, neither after this manner are there caused contrary motions; for that day, that purging is ordered sweaters are not administered; but if purgers were mixed with the sweaters then there would be contrary motions. And besides by the admision of purgers, the decoction being to be used so many weeks it would become nauseous and ingratul.

Whether
purgers
ought to be
mixt with
the deco-
ction.

Hercules

Whether *Hercules Saxonia* also holds *de lue Vener.* Cap. 38. That purging may be or purgers may dered every day, to wit in those, in whom sweat cannot, or ought not to be caused: serve instead he thinks sweat cannot be provoked in them, who either are of such a hard and thick of sweaters. Skin, that they can by no means sweat, or in those who fall into fainting and swooning fits, as soon as sweaters are administered: but he thinks they ought not to sweat, in whom the Veneral disease possesseth not the Joynts, nor the Skin, nor the superficies of the body, but hath rather taken up its seat about the bowels; but this opinion seems not to me to be agreeable to truth: for whereas he thinks, that some ought to have purgers administered because they cannot sweat by reason of the thickness of their Skin, or because they presently fall into swooning fits, is agreeable neither to reason, nor experience: for scarce any one hath so thick a Skin, that the pores will no way open for sweat; and though on the first daies sweat doth not presently follow, yet after that the Humors are attenuated by the use of the decoctions, the passages and pores are opened, then sweat succeeds; especially if those Laconick Baths be applied as shall be said hereafter. And the Patient may moderate his sweating, that he need not fall into fainting or swooning fits: and they that cannot endure sweating, will not easily endure purging. Last of all purgers cannot performe the same, as those sweaters do. But that in some bodies sweaters are not to be administered, is false: for though the disease may have its principal seat about the Liver and bowels, yet it cannot be, but also vicious Humors do abound in the whole body, whenas the Liver infected with this disease doth generate virulent blood, and distribute it to the whole Body.

Chap. XIX.

Of the manner of using these Medicines.

The manner of using these Medicines. **A**S concerning the manner of using these Medicaments, first of all the decoction of Guaiacum is administered, for the most part in the morning, and afternoon two hours before Supper. In the morning 'tis given from five ounces to eight or nine ounces before the evening, from three ounces to six ounces; the powder is

The dose of the decoction. given to two drams, the extract to two scruples. Yet sometimes the evening draught is omitted, especially at the beginning, before the patient is accustomed to the Decoction. For what was said above of moderating the quality of the decoction, that also is to be observed concerning the quantity of the Decoction to be given, that the sick be not offended and overcharged which too much of it; which unless it be observed, it happens sometimes, that the sick fall into Feavers, contract Crudities, and there is caused a looseness, ill habit of body, and a Drop-sie.

After the same manner we must give the Decoction of Sarsaparilla, China Root, and the compound decoctions. For though some do prescribe here divers doses, yet he shall not erre, that shall administer them in the aforesaid manner.

Sweat.

And indeed after the mornings draught, we must endeavor that the Patient sweat; for experience teacheth, that they that sweat not upon the taking of these Medicaments, are scarce clearly freed from this Disease: but that sweat may flow the easier, let the Patient sleep one hour after he hath taken the Medicine, for so the Medicine is deduced into act. As for the time of sweating, first of all it is sufficient, if the patient sweat one hour, afterwards by degrees let him rise to more. But the manner of sweating is various; most do suffer their Patients to sweat in bed, which that they may do the easier bottles full of warm water, or hot brick wrapt up in Cloaths, must be placed under the Arm-pits and sides of the Patient. Some provide a woollen Mantle such a one as *Andreas Tenzelius*, hath described and set forth in *Exeget. Chymiatre*: which manner of sweating is not a little troublesome. But not without cause most men do prefer before all kinds of sweating in this disease, that which is

The time of sweating.

in a bath or sweating place as that which brings less trouble to the sick, when as weak Patients sweating in their bed, may use a Bath and a sweating place, and the heat of the bath may be made more intense or remiss at pleasure, be made dry or moist as the condition of the sick requires: yet a moist bath, and gently heated by the Vapor of hot water is most commodious; whenas that hot vapor of the Water, doth open and Lax the pores of the Skin, that the sweat flows the easier, and without any trouble to the sick: but dry baths are altogether laborious, and ought not to be used in dry and Melancholy bodies.

But those sweating baths are twofold, first of all those great ones in which a body may walk, such as are our baths so commonly called in which many at once may sweat and be washed; such though they be used for the cure of this disease by Barbers in Italy, yet they ought to be eschewed, whenas if one that is lightly infected, receive that which exhales from another grievously infected, he may be infected more, and 'tis more commodious that every sick body sweat by himself. Then there are baths or small sweating places in which one alone closed up may sweat: such are made of boards of wood Joyned together, which again are twofold, some which can receive a man upright. Without bowing of his body, *Jul. Palmarius* describes it *de lue Vener. Cap. 17.* of a Square figure, seven Foot high, and four foot long and broad, whose description you may see there. With us others are in use made up of boards mutually receiving and received by one another, square, but oblong, of that breadth, that a man may without any impediment set and extend his Arms, but two stories high, one where the Patient sets, so high, that as he sets he may put forth his Head, through a hole of the boards strictly fitted for the neck, but the lower part is of that depth, that if the Patient setting stretch forth his Feet, he cannot reach the lowest board: and it hath a little door, through which the sick may go into it, and a window behind, which may be opened upon necessity: and it hath another little door towards the feet, through which an Iron or brass Vessel is put in full of stones or refuse Iron red hot; and a Pipe in the upper part of it over against the Vessel, through which either plain hot water, or some convenient decoction is poured on the stones or dross by degrees, as much as the Patient can endure, from whence the Vapor exhaling diffused all through the body doth provoke sweat: and though after this manner the head be thrust forth, yet that doth no hurt, neither is it unprofitable, even where the head is affected; for though it stands forth, yet that sweats plentifully enough: in the interim the Patient doth not attract again by drawing in his breath those filthy Vapors which do Evaporate from his body, but the free and pure ayre by which he is refreshed, that he doth more easily and happily endure sweating. But in what bath soever sweat is provoked, after the sweating is over the bath ought to be opened, that those filthy Vapors may be blown away and disscussed by the free Air.

The most convenient time for sweating is the morning, yet sometimes we may sweat after noone, in which case the strength of the Patient is to be considered for there are some who wil easily endure sweating twice a day, other who but once, others who are not able to endure sweating once every day. But the Medicines which move sweat must be taken upon an empty stomach, and an hour or two after the taking of the Medicine sweat must be urged.

But we must sweat so long as the strength of the Patient wil bear it, and if the patient sweat in a bath, or sweating place, and is not able to endure any longer the heat of the bath, he must be laid in his bed, in which afterwards sweat wil flow of its own accord, and without any loss of strength; the sweat must afterwards be wiped of, and after sweating the cold ayre must in no wise be admitted.

But how often we must sweat, and how long the use of these Medicines is to be continued, cannot be defined in general. They commonly teach that these decoctions are to be continued for forty daies, yet sometimes twenty five daies or thirty do suffice: and sometimes in a more grievous Disease we must persist in the use of these

Baths twofold.

When we must sweat.

How long.

How often.

these Medicines til sixty daies and more. For we must sweat so often and so long, til the Malignity of the Disease is overcome, and the vitious and virulent Humors are discuffed by sweating, and al the Symptomes cease, especially the running of the Reins and Callous skars. For as long as these last. We must remain in the use of these Medicines. Nay though al the Symptomes do vanish, yet it is good so to continue the Medicines for some daies, that also the Maligne dispositions of the parts may be taken away, that there be no fear of a relapse.

But after noon, though sweat be not moved, yet the same decoction given then, may insensibly discusse the vitious Humors, and destroy the virulent disposition impress both on the parts and Humors.

CHAP. XX.

Of other common Alexipharmaca.

*Common
Alexiphar-
maca.*

BUT some trust not to those Alexipharmaca alone, as Guajacum, Sarsaparilla, China Root, and Sassafras wood, but add also common Alexipharmaca. This was first done by *Fernelius*, who gave to those that were to drink the decoction, half a dram or one dram of this Opiate, or Alexipharmacal antidote, which is prepared thus.

*Fernelius,
his antidote.*

Take of the Leaves of water Germander, half an ounce; Poley of the mount. Penny royal, white Hore-bound, Origanum, Calamint, St. Johns-wort, centory the less; French Lavender, ground pine, Germander, Spikenard, of each two drams; of the Seeds of Anise, Fennel, Parsly, wild carrot, Libistick Rue, Basile, Clary, Cresser, of the Berries of Bay, Juniper, of the Seeds of Male Piony, of each half a dram; of the Roots of round Birth-wort, Gentian, Dittander, Valerian, Asarabaccha, of each one dram; of Nut-megs, Cloves, Pepper, Saffron, of each four scruples; of Cinamome, Myrrh, Castor, Styra Calamite, of each three drams; of good Honey as much as is Sufficient, make an Opiate.

Jul. Palmarius, *Fernelius* his Scholer followed him, who, as was said before in *Lib. 1. de lue Vener. Cap. 7.* writes, that *Fernelius*, was most averse from the use of Quick-silver, and first dared to promise the Cure of this Disease without the help of that, and did take care for the compounding of many Alexipharmaca at his House, which he administred against the Mischeif of this Disease, with Guajacum and also without it, two of the which, which he found to be most excellent and efficacious, he describes, the first was discribed even now, the other is this.

Take of Divils-bit, Scabious, Burnet, flowers of Marigold, Mullein, Plantane, Balme, Rue, Broom, Origanum, Rosemary flowers, Red Roses, of each three drams; of the Seeds of Citron, Sorrel, Fennel, blessed Thistle, of the Roots of Dittander, Gilliflowers, Tormentil, round Birthwort, Gentian, Zedoary, Roman Woolfesbane, of each two drams; Hartshorn, shavings of Ivory, Wood of Aloes, Yellow Saunders, Choice Cinamome, of each half an ounce; Saffron, Cloves, Nutmeg, of each two drams.

And he relates that he called the first composition, the greater Opiate, the other the less, and that he gave for a dose half a dram of either with the like quantity of conserve of Bugloss and half a scruple of Mithridate, and sometime without Mithridate; but that he, after *Fernelius* departed this life, out of them both did compleat one, adding also certain other Medicines, which he found to be prevalent against poysons, and most fit to provoke sweat, the description of which is this.

Take

Take of water germander half an ounce; of divels-bit, scabious, burnet, Poley *Palmaris* Mount, peneroyal, calamint, white sweet smelling Horehound, *origanum*, mint, his antidote St. Johns-wort, centory the less, French Lavender, Germander, Ground Pine, Plantane, Balme, rue, Time, Elder, each two drams; of Hyssop, the lesser Sage, Oake Ferne, *vervin*, both speedwells each two drams; Flowers of Betony, Marigould, Mullen, Broome, Rosemary, Jasmin, Sage, Red Roses, St. Johns wort, Bugloss, Burrage, Violets, Water Lilies of each three drams; Seeds of Anis, both Parsleys, wild Carot, Scarlet Graines, St Johns Wort; Libistick, Rue, Lovage, Basil, Berries of Bay, Juniper, seeds of both Pionies, Hart-wort of each one dram and half; Seeds of citron, Sorrel, Blessed Thistle, Fennel, of each three drams; of the roots of male Piony, Round Birthwort, Gentian, Sweet cane, Flowerdeluce of Florence, Sweet Cyprus, each one dram; of Angelico, Dittander, Gilliflowers, tormentil, Zedoary, Romane Woolfsbane, of each three drams and an half; of choice perle three drams and hal; of Harts horn, Shavings of Ivory each one ounce; wood of aloes, yellow saunders, bone of the heart of a hart, both currals each half an ounce; choice cinamon one dram and half; Balsome wood, if it may be had one ounce; of al pretious stones, each half a dram; of Nutmeg, mace, loves, myrrh, styrax, Calamite, Benjamin, Saffron, Castor, each half a dram; juice of liquorish one ounce; oyl of the seeds of Fennel, Anise, of Sage, mint, juniper, Nutmeg, Cloves, red opobalsamum brought out of America if it be to be had of each one dram.

Let al the the herbs, flowers, and rootes be gathered at that time they are of greatest strength, let them be dried, and kept in paper cases, then al of them being reduced into a most fine powder, let them be mixt with wine and honey, and be boyled into an electuary, til it comes to the thickness of wel prepared mithridate: yet the flowers may be candied and kept with sugar, that they may be mixt with the other things towards the end of their boyling, to one pound of honey mix two ounces of the powder. Let it be kept in a most large earthen vessel, whose third part may be empty, least it swell up, and grow hot, neither let it come to that use we shal by and by speake of, before it be three years old. He ads there also a cordial water, and an alexipharmacal powder, their descriptions are these; the Cordial water.

Take Of the leaves of sage, mint, marioram, rue, hyssop, *origanum*, the tops *Galmaris* of betony each one handful. Bruise them al and put them in a great earthen vessel his Cordiol in a warm place and cover them with the water of blessed thistle, that they be under water. it, every day stir them with a stick, and before they soure, (which wil be the fourth or fifth day after) Strein out the liquor and keep it, casting away the Faces. Again.

Take of plantane leaves, marigold, balme, mullein, St. Johnswort centory the less, burnet, each two handfuls. After they have been steeped four dayes and streined cast them away, and take again of water germander, Bivels-bit, fennel, parsley, bugloss, burage, angelico of each one handful. Which also being steeped, so many dayes streined and then cast away.

Take of the roots of angelico, dittander, tormentil, betony, Zedoary, each half an ounce; of galangal, three drams; Nutmegs, Cloves, each one dram; seeds of Fenel, Citron, Sorrel, Blessed thistle, Juniper berries each two drams; Shavings of Ivory, harts horn, wood of aloes, Yellow Saunders, cinamon each one dram; Saffron half a dram; make a powder of it and mixe it with the Liquor streined, then weigh out of the amulet against this disease, and of choice mithridate each one pound and half; of old treacle foure drams; and being mixt with the said liquor and powder, and put up in a glass alembick, or an earthen one glazed, expose them six or eight dayes to the heat of June, til they grow hot, and be perfectly fermented, and at length distil them in a double vessel with a most gentle fire. If the same simples be put into a new pot with the water of bastard saffron and be heated fifteen dyes in warm horse-dung, there wil be extracted a more excellent Water.

Take

Take of the aforesaid water three ounces; Syrup of Lemmons and Violets, of each six drams; Make a dose.

A Description of the Powder.

Palmarius his Alexi-pharmacal Powder. Take of the shavings of Ivory, the younger Harts-horn, Choice Pearles of each half a dram; wood of Aloes, Yellow Saunders, the bone of the heart of a Hart, of each one scruple; Seeds of Fennel, Coriander prepared, of each one dram; the Leaves of Mint, Plantane, Vervin, Burnet, of each two scruples; the Roots of Tormentil, Betony, Zedoary, of each half a dram; the dried flowers of Betony, Marigold, Broom, of each half a dram; Sugar of Roses three times as much. Make a fine Powder.

The dose is one spoonful beforemeat, and before a draught of the sweating drink, if the Patient refuse the use of the Opiate.

And in *cap. 13. Lib. de lue Vener.* where he disputes, whether this Disease may be perfectly cured by the use of Guajacum alone, or whether there be need of the assistance of other Medicines joyned with it, at last he concludes with a distinction, that the vertue of Guajacum is neither so great, that that alone can wholly Extirpate, the Roots and whol malice of the Venereal poyson, nor so weak, that it can perform nothing without the help of others; that by the use of that only, the Humors be wasted, al Symptomes wil at length be allaied, and wholly lie hid, but yet the taint of the disease, which hath already taken possession of the solid parts, cannot in most bodies be wholly overcome, and extinguisht by that remedy.

Rondeletius his Treacle Water. *Rondeletius*, doubtless followed these men also, who *de morb. Itali.* commend his Treacle water, which provokes sweat in the inveterate Italian Disease, and takes away the pains, the description of which is this.

Take of Treacle, one pound; of Sorrel, three handfuls; of the flowers of Chamomel, Penny-royal, Pomegranates, blessed Thistle, of each two ounces. Mix them al in white wine and distil them.

Of which water give three ounces to drink with three ounces of Sorrel and Bugloss water, when the Patient goes into his bed or hot houlet.

Platerus also thinks that it is confirmed by experience, that the decoctions of other plants, besides Guajacum, Sarsaparilla, China, Sassafras; can performe the same in this disease as they do, and therefore falls into this opinion, but evilly. That the late mentioned Medicines which are accounted alexipharmaca of this disease, do work rather in the cure of this disease, by moving sweat, then by an occult quality, and therefore he thinks that not only a decoction of box wood, Juniper, Cedar, Cypress, and Savin, Agallochus, Rose-wood, but also the decoction, and Treacle water, which are given in Pestilent Feavers, are profitable also here.

Whether treacle be good in the Venereal disease. *Aurelius Minadous de lue Vener. cap. 53.* when he had spoken many things in the praise of Treacle at length concludes, that Treacle also may be used against the venereal virulency, as a most excellent Alexiterum, not as if it were to be numbered amongst them, which of themselves are said to expel this virulency, but amongst them, which expel it by accident, in as much as it doth strengthen the spirits, by a Conformable proportion to them, so that they being now made strong, are able as the principal agent, together with the Treacle as their instrument to overcome the malignity of the venereal virulency.

Trochisks Cypheos. The same Author *cap. 44.* commends Trochisks Cypheos in this Disease, as being such, which do principally strengthen the Liver, which in this Disease is chiefly affected, and free it from Excrementitious Humors, which are collected in this Disease, being powerful to concoct, cleanse, and dry up the Excrement and therefore as *Galen* thought this Composition was to be preferred before al other Medicines written by *Asclepias*, *Andromachus*, and other most Famous Physicians for the affects of the Liver, so he thinks the same is to be used and Magnified beyond al others in this Disease.

But

But as I wil not dissuade any one from the use of such common Alexipharmaca in the cure of this Disease, whenas in other cases it is a custome, when any one hath drank poyson, or any waies taken it, and knows not what it is, to give treacle and common Alexipharmaca: so I wil counsel no body. that he confide only in these Medicines, and neglect those proper ones. And I see it done by very few Physitians, as being taught by experience, that this Disease cannot wholly be extirpated without Guajacum, Sarsaparilla and the like, neither doth it follow, that therefore, because some sick of an incurable French Pox, could not be cured by Guajacum wood, that we must place more hope in these Medicaments. For they that could not be cured by those proper Alexipharmaca, wil much less be cured by these common ones.

CHAP. XXI.

Of the Cure by Quick-silver.

And this is the chief kind of Medicine for the cure of the Venereal disease, and this is the chief manner of curing it. For there is also another way of curing the same Disease by quick-silver, which was first brought into use by Chyrurgions and barbers, afterwards also was applyed by learned Physitians. For whenas, as was said before by *Fracaſtorius*, certain Barbars had found out amongst the Medicines of our ancestors for the filthy scab joyned with the pains of the joynts, unguents compounded of Mercury and Sulphur, other Medicines profiting little, they began to use them. The use of which being not altogether unsuccessful, afterwards quick-silver was used in the cure of this Disease by many learned Physitians.

But though it be not my purpose in this place to treat of quick-silver, which the Chymists call Mercury, but rather of the use of it in curing this disease, yet I shal admonish you of a few things in general. Quick-silver is reckoned amongst the mettals, and 'tis called Silver from its color in which it resembles silver, but quick because 'tis alwaies moveable: and its Nature is altogether wonderful, which many learned men admire, and which hath tormented the wits of many Chymists, and deluded their pains. For though it be mortified, fixed, or what way soever it oftentimes seems to be changed, yet it is easily reduced to its former quick Nature. And though it be reduced into the smallest bodies, and transmitted through leather, or be otherwise reduced into atomes, and a strang form, yet it retaines in them its whol Nature and essence, and returns to its former quick body.

Naturalists and Physitians differ concerning its temperament, whiles some hold it to be cold others hot. *Matthias Unzerus*, hath collected the arguments of both in *Anatom. Spagy. Mercur.* to alleage al which at large in this place, is not our intent, for you may consult with him on that business in the alleaged place; yet by and by we shal make mention of some of them: but *Unzerus* himself, *cap. 12.* goes the middle way, and holds, that some natural things have oftentimes in them diverse, and wholly contrary vertues and faculties, and some of them are manifest, others occult, and that these depend on the specifick form, those on the first qualities of the Elements, which he proves by the examples of Wormwood, Rhubarb, Vinegar, and others: and he thinks Mercury is to be reckoned in the number of these which may be considered both as crude, and as prepared: the crude he thinks hath mixt qualities, and is partly hot, partly cold; and that diversity is to be attributed to the divers parts of the matter of which it consists, some of which are very thin, Subtile, pure, and Spirituous, but some are thick, earthy and feculent: but he thinks that Mercury prepared hath no longer any

Of the cure
by Quick-
silver.

Quick silver
whence so
called.
Its wonder-
ful Nature.

Whether
Quick silver
be hot or
cold.

*Matthias
Unzerus* his
opinion.

cold quality, but they are wholly taken away by the outward help of fire, or by the Application of the menstrua, and therefore that it is very hot.

Hercules Saxonia.

Hercules Saxonia, holds the same *de lue Vener. Cap. 39.* Whiles he teacheth, that this Medicine doth exulcerate, and cause heat and inflammation; on the other side it causeth nummels, Palsies, and other cold affects, and that it proceeds from the inequality of its temperament, and because 'tis an imperfect mixt body, and if it be prepared by calcination, that the cold substance doth fly away, and that which is left, is fire,

The authors opinion.

But these authors erre very much, indeed it cannot be denied, that there are many Medicines, which have Heterogeneous parts, by vertue of which, they produce divers effects, which parts also may be separated by the help of art: But that Quick-silver hath such parts, is false, neither was there yet ever found any Chymist, who could show the diverse parts in it, and separate them by art: for the whol is Homogeneous, if there be any thing so in Nature, and either it all flies away, or all remains, and what way soever it is prepared, at last it all revives wholly Homogeneous: and

Quick silver is Homogeneous.

whatsoever Chymist can show any Heterogeneous parts in Quick-silver, as in Rhubarb, shal be in my esteem a great Apollo. Neither is precipitate of another Nature then that which is crude, neither doth Quick-silver looke any thing by its preparation, and that prepared does differ from the crude only in external form which is caused by the admistion of other things, which sometimes are Salt parts as happens in Mercury Sublimate and Precipitate, sometimes only watry as when Mercury is reduced into water by a retort without the admistion of any other thing, as the same *Unzerus* teacheth *Lib. 2. de Anatom. Mercur. cap. 2. n. 4.* for this water is nothing else but the Quick-silver resolved into the smallest bodies or Atomes by the strength of the fire, and mixt with watry Vapors, or the moist Air. Yet in that there appeare no effects of cold, but rather of heat, and that very water, as other mercurial waters, wil dissolve gold in like manner, *Saxonia* is mistaken, for Quick-silver is no imperfect mixt body, but a body that hath the most perfect mision, and cannot be destroyed, by any art of the Chymists, but every where retaines its form, neither whiles it is calcined (or rather exposed to the fire, for Quick-silver cannot properly be said to be Calcined) do the cold parts fly away, and the fiery stay behind, but if those parts which are raised up be received, they are of the same Nature with those that remaine, as is wel known to the Chymist.

Quick silver is hot.

Therefore whenas this Reconciliation is of no force, let us see who is in the right whether those who hold Quick-silver to be hot, or those that say 'tis cold. But I think that they are altogether of the righter judgment, who think it to be hot; for that appears by its great penetrating and corroding vertue, so that it penetrates and Eats into Metals, and the flesh, nay the very bones are corroded by Mercury precipitate and sublimate. And *Libavius* writes in *tract. de igne natu. cap. 30.* that he knew by the relation of a most learned Physician, that a certain Chyrurgion dying by the too frequent use of Mercurial Medicines, had his bones plainly brittle or frangible.

The answer of the reasons against

But whenas they object first of all, that whiles 'tis quick and whol it doth not corrode: the cause of that is, because it cannot insinuate it self into the body, and worke upon it, whenas all its parts are most closely knit together, nor cannot be mixed with other bodies; but the Medicines prepared out of it as Mercury sublimate, Precipitate, Oyl of Mercury, and if there be any more of this kind, have a great power to burn and corrode not only by the reason of Salts commixt, which is very little, but because 'tis resolved into the smallest bodies, and being mixt with the Salts it can adhere to the body, and by the benefit of things admixt, most intimately insinuate it self into it.

2.

Secondly, whereas Quick-silver appears cold to the touch, that is common to it with steel, Brats, Lead, Wine, things of their own Nature hot, which by accident feel to be cold.

Thirdly,

Thirdly, whereas some also from the effects would collect quick-silver to be cold, in that they are very much deceived; and they attribute those effects to cold, which have their dependance elsewhere. Truly, they that drink the waters infected with quick-silver on the Alps, are sick of divers fluxes, and are taken with a bronchocele. Goldsmiths, and others, who often deal with quick-silver, are seldom healthful and long lived, but are obnoxious to numnesses, tremblings, palsies, convulsions, lethargies, suffocating, catarrhs, and apoplexies. Thus *Fernelius* relates of a certain Goldsmith that imprudently admitting the vapour of quick-silver only, presently became stupid, drowzy, and wholly speechless. *Ferdinandus Ponrettus* relates that the same happend to another, *lib. 1. de vene. cap. 3.* And *Forestus, lib. 8. obser. 5.* writes, That a certain yong man learning the Smiths art upon the atching of a Cup with quick-silver, had all the hair of his head fell off, and that his face became extraordinary pale, and all his body tremulous: and many others have observed the same. And *Jacobus Oethæus, in his observat.* reports, That a certain yong Noble man troubled with Crab-lice in his Privities, used Mercurial Oyntment to drive them away; upon which his Yard grew cold and sluggish, and unfit for Venery. But here is a fallacy of the cause, for quick-silver doth not do these things by cooling, but because it hath a peculiar and occult quality, that is an enemy to the Nerves and Brain, as appears in many other stupifying poysons.

3.

Fourthly, That which is Objected, is easily Answered; to wit, That the damage brought upon mans body by quick-silver, is cured by the use of hot things; as Sage, Hyssope, Origanum, Clary, Rue, Castor, and the like: For those Medicaments are not theretore applied to the preratural affects caused by quick-silver only, because they are hot, but because they are friends to the Brain and Nerves: and furthermore, as they themselves grant, by a specifick property are enemies to the Mercurial virulency; and that such things are not therefore applied because they are hot, but because by a peculiar vertue they are friends to the Nerves, it appears by this, because other hot things, as Ginger, Pepper, and the like, which have no specifick property freindly to the Nerves, do not perform the same.

4.

But concerning the Occult Vertue and Propriety of Quick-silver, we chiefly meet with two doubts; First of all, Whether it be poysonous: next of all, Whether it be rightly applied for the Cure of the Venereal Disease.

Concerning the former Question, Whether Quick-silver be Poysonous, we have already treated before, in *tractat. de Chym. & Aristot. consens. & dissens. cap. 19.* where we speak of Mercury, and we said there, That *Matthias Unzerus de anatom. spagyr. Mercu.* did endeavour to prove at large, That Mercury is not poysonous, with whom others also agree; especially those who urge Experience and the Authority of learned Physicians. *Avicen, lib. 4. Fen. 6. tract. 1. sum. 1. cap. 2.* writes, That Quick-silver doth not hurt many that drink it; for that with its qualities goes forth by the stool. *Haly Abbas lib. 1. pract. cap. 35.* *Rhases in no. ad Mansor. de potu argen. vi.* do affirm the same. *Brassavolus* also doth testifie in *lib. de stirp. exami.* That he hath given Quick-silver to Infants to expel Worms. And *Fallopianus de Metallis cap. 37.* holds, That Mercury may be taken into the body without the fear of any hurt; and he relates that Beasts do swallow quick-silver without any harm: For when they abound with Worms, which your Leeches know by their breath, if they swallow four several times half a Filbert shell full of Quick-silver cast into their mouths, they are cured, no worse Disease succeeding it. And he witnesseth that he hath given to Children in extream danger, whom other means have availed nothing, the quantity of two or three grains of Millet with evident success. The same Author, *de Morb. Gallic. cap. 76.* writes, That he saw a Woman which drank a pound of Mercury to cause an Abortion, yet without any hurt. *Matthiolus* also reports in *lib. 1. dioscorid. cap. 170.* (which also *Eustachius Rudius* relates, That he hath often observed, when he practised Physick there) That in the Town *Gorritiensis* the Nurses do give Quick-silver to little Children to drink in the quantity

Whether
Quick-silver
be Poysonous.

'Tis denied.

quantity of two grains of Millet for the Worms in the Belly, without any trouble at all. And the Midwives when great bellied Women lie long in labor, do presently give to drink a scruple weight of Mercury without any inconvenience: and *Georgius Agricola* relates, that a certain Woman did oftentimes fraudulently give Quick-silver to her Husband that she might kill him, and nevertheless he continued health-ful nay it hath been observed that some thirsty in the night, have in the dark taken up Vessels full of Quick-silver instead of drinking Cups, and with a wide Throat have taken of the Quick-silver in a great quantity, yet have cast it forth again by the stool without any hurt. And *Eustachius Rudius*, add Lib. 5. de *Morb. occult.* cap. 15. that he hath seen this, and that others have observed it, that some bodies have been dissected, in which no small quantity of Quick-silver hath been collected in the Cavities of the bones, from the unction in the French Pox, who notwithstanding have lived many years after the unction. Which seems not possible to be done, if it were poyson by Nature.

'Tis af-
firmed.

But *Galen*, *Aetius*, the reconciler, *Cardan*, *Fernelius*, *Ferdinandus Pontettus*, *Jul. Palmarius*, whom I alleaged in the quoted place cap. 19. de *consens. et dissens. Chymic. cum. Aristotele.* do differ from these. And experience it self hath brought most eminent men into that opinion, by which it is evident, that quicksilver doth no less cause numnesses, convulsions, tremblings, palseys, epilepsies, apoplexies, syncopes, than other poysons, nay sometimes death it self. And some do report, that they are seldom long lived, who digg up the veins of quicksilver; and though they be very strong bodied, and of the best temperament, that they can scarce hold out in that work to the fifth yeare, but by drawing in the venenate vapors they are taken with a trembling of all their parts.

The Au-
thors opini-
on.

And the opinion of these we think altogether more consonant to truth as being that which is confirmed by experience it selfe: but as concerning the experience of those, who write that quicksilver hath often been drank and given without any hurt, that doth not excuse quicksilver from its venenosity. For to the compleating of an action, there is required a right application of the agent to the patient, and some stay, which whenas it was wanting in the alleaged examples, the quicksilver could do no hurt for quicksilver is given either alive or prepared, if it be taken alive 'tis less hurtful, for whenas quicksilver is a body most exactly mixt, and the least parts of it do most pertinaciously cohere to one another, from whence also 'tis continually moveable, whiles it is whol and alive it brings little or no damage to our body, but presently is cast forth by the stool. For in like manner as a leaden, or other metallick bullet, if it be swallowed whol is presently cast forth of the body, and brings no hurt, but if it be resolved into the least parts, and contract rust, may do very much mischief, as that history concerning lead doth sufficiently teach us, which *Fernelius* recites de *lue Vener.* cap. 7. So also if quicksilver be taken whol, moveable, and coherent to it selfe, and by reason of its mobility be presently again cast forth of the body, it brings no damage; but if it be resolved into the smallest particles, and especially with the admision of salts, and by their help be as it were fixt to the body, and penetrate into it, both inwardly and outwardly applyed, it causeth most greivous evils, as sublimate and precipitate do sufficiently teach us, neither is there any reason for any one to ascribe that corroding faculty to the salts mixed; for there is no salt in the fume which exhales when Silver is gilding over, and yet that very fume is highly hurtful; neither can so little salt as is mixt with sublimate or precipitate, cause so great hurt, whenas salt though it be given in a great quantity, doth no such thing.

Mercury
prepared.

But as concerning prepared mercury, I know indeed, with how great prayles some do extol mercurial medicines. Some cal precipitate the angelical pouders, and otherwise prepared mercury of life. Some commend the flowers of mercury of which we spake in *consens. et dissens. Chym. p. 365.* others *mercurius dulcis*, and so highly, they write if it be rightly prepared and given 'tis as gentle as manna; *tamarinds*, *castia*, and therefore they use it in the slightest diseases, which might easily

sily be taken away by more benigne medicines. But these commendations are too much, neither is their rashness commendable, who give quicksilver in any disease, whenas we have every where examples of them, who by the use of the medicaments, have not only been cast into danger of their lives, but have plainly perisht by them. Whereupon *Guish. Fabricius* in *Epist. ad D. Doringium lib. 3. observat. annexa.* thinks that that called *mercurius vitæ* may sometimes be called *mercurius mortis*, and mercury of life eternal. And how much *mercurius dulcis*, which is counted the gentlest of al, may sometimes prejudice, was said in the alledged place; but that quicksilver may sometimes be given without any dammage coms to pass, either because 'tis crude, or retaines the nature of that alive: and therefore as was said even now, can work little on our body, of which sort is *mercurius dulcis*, and the flowers of silver mercury, or because it is in its kind fixt. For as whol mettals though they be taken into the body, they do not affect it unless they be resolved, so so also whenas fixt mercury doth as it were put on the nature of fixt mettals, so it doth not hurt, as that which is stil volatil, and can easily insinuate it self into the body.

Yet prepared Mercury ought not rashly to be used and be given in every disease or body especially at the begining, but in those only in whom there is great store of vicious humors, which that may empty, and where the body is strong, for as Mercury sublimate and precipitate outwardly applied in tordid ulcers, doth mundefie them, and toucheth not the sound flesh as long as there is any filth, but if it be layd on the sound flesh it eats that: to also if quick-silver taken into the body do find corrupt humors on which it may work, it doth not easily damnesse the more inward parts, but it workes upon the humors, and causeth that they be emptied; but if there be no such humors there, it also assailes the sound parts. But whenas Quick-silver given inwardly is not used onely for the Venereal disease, but to drive away many other diseases, we wil speak no more of that here; but let us now inquire concerning it, whether it can, and how it may do good in the Venereal disease.

As concerning one of them therefore, to wit whether quick-silver ought to be given in the French pox, and whether it may be safely, and by what vertue it acts, Physicians do very much differ. *Epiphanius Ferdinandus* indeed, *Histo. 17.* thinks that amongst ninety Authors that have writ of the Venereal disease, that there are onely foure, who have disallowed of the use of Quicksilver in this disease, viz. *Casparus Torellus*, *Montanus*, *Minadous*, and *Fracastorius*, but there are many more, which *Johannes Baptista Silvaticus* doth recon up *Contr. 34.* which *Silvaticus* himself is in the number of those, who denny Quick-silver to be an enemy to the essence of the french pox. For *Ulericus abbuten*, a German knight and Physician *Cap. 4. in lib. de morb Gall:* writes that in his time scarce one in a hundred that was anoynted with Quicksilver did escape a relapse, the benefit of it lasting but for a few dayes. *Sebastianus Aquilianus lib. de morb. Galli. Cap. 4.* Cals the cure of this disease performed by quicksilver, sophistical, and writes that al anoynted with it in his age suffered a relapse. *Gaspar Torelus* bishop of *St. Justa*, in his declamation against unction with Quicksilver, cals it a pernicious medicine and thinks it is to be shunned as the plague. *Joh. Baptista Montanus*, tract. de morb. *Gal.* writes that quick-silver doth indeed repress the disease for a certain time but does induce an evil quality in the part, and in no wise remove it, wherefore in process of time, al things become worse then they were before. *John Fernelius lib. 2. de abdit. morb. caus. cap. 14.* writes that he beleves nothing less, then that a medicine made of Quick-silver can cure the Venereal disease, since that in his judgment it only takes away the symptoms, leaving the root behind. *Victor Faventinus cap. 7. de morb. Gal.* thinks the cure of the disease with Quick-silver is false, deceitful and dangerous. Meither does *Fallopins* magnesse this cure, as appeares by his book *de morb. Gall. Cap. 76.* *Bernardus Tamiranus* also hath openly condemned this cure *lib. 2. de morb. Gall. cap. 13.* as also some others: to whose opinion

In what disease prepared Mercury is to be given.
Whether quick-silver be to be given in the cure of the venereal disease.
The negative opinion

as I said *John Baptista Silvaticus* joynes himself, and writes that he doth not believe, that quick-silver can wholly cure this disease, and that tis an antidote diametrically repugnant to the Venereal evil: he doth not deny indeed that this medicine may allay some evil and vehement accidents of the disease, but that tis diametrically adverse to the essence of the french pox, which is an occult property, inimicous to the liver, and that it can overcome that, he doth not believe. But though at the first rise of this disease, *Carpus* the Chyrurgion first made use of this medicine (whome perhaps that barbor followed, whom *Fracastrorius* makes Mention of) being moved by this reason, because he had observed that the ancient Arabian Physicians did make use of Quick-silver against the contumacious scab, and many other rebellious diseases of the skin; yet experience hath no way confirmed this remedy as the best, and therefore it hath been rejected by many physicians: for if Quick-silver were one of the antidotes of this disease it would have alwaies and every where answered the expectation, and there had bin no need that more effectual remedies should have been sought for from the remotest Countries beyond the Seas, which have hitherto been used with most happy success, that no man doth any farther doubt of their efficacy in this Disease; and though Quick-silver doth heal French Ulcers, yet it doth not follow, that 'tis an Antidote against the Virulency of it as neither those Medicines, which heal Buboës, or Carbuncles in the plague, can for that reason be accounted for Antidotes. *Aurelius Minadous* agrees with these, *Lib. de Virul. Vener. cap. 39.* Who wholly rejects the use of Quick-silver in this Disease, moved thereunto by three reasons; the first is, because he never saw any restored to health by the use of it; on the Contrary he hath rather observed many that by the use of Quick-silver have suffered worse Symptoms in so much that they have affirmed, they have received greater damage from the supposed Remedy, then from the Disease: the second is, that Quick-silver is hurtful by Reason of its excessive coldness: the third is because no body can explain, after what manner Quick-silver doth good in this Disease. To which some add a fourth Reason, that of it self it is poyson; and a fifth that many have died by the use of it.

The affirmative opinion.

On the contrary many other Physicians do very much commend the use of Quick-silver in this Disease: and that I may now pass by others, *Epiphanius Ferdinandus*, *Histor. 17.* writes that he can make good by Oath, that he hath perfectly cured, leaving no evil Symptoms, a hundred and fifty people Frenchified of all Ages; Sexes, and of diverse Temperaments, and at divers seasons of the year; and he names another most experienced Physician, *Johan. Laurentius Protopapa*, who hath affirmed to him by Oath that he hath cured above a thousand men Frenchified with the Mercurial Unguent with most happy success, and he writes that we ought to give God thanks, that he would make known so wonderful a remedy for so great a disease.

The Authors Opinion.

That we may quit our selves of this difficult controversie, First of all we think the use of Quick-silver is not wholly to be rejected in the Cure of this Disease, neither do the reasons alleaged before by *Minadous*, or others evince it: for first of all as concerning experience, here one experience may be opposed against another, and there are many Physicians who taught by experience it self do with wonderful praises extol Quick-silver in this Disease. The Second reason, that Quick-silver is to be rejected because it is cold, is false, for the effects of Quick-silver as was said before, do teach us that it is rather hot then cold. Thirdly, concerning the manner how it works, and cures this Disease, we shall see hereafter. And though that manner could not be found out, yet the experience must not therefore be denied; for there are many Medicines that work by occult qualities, whose manner of acting cannot be perfectly explained. Fourthly, though Quick-silver be poysonous yet 'tis not therefore wholly to be rejected in this disease, whenas other venenate things come into Physical use, as opium, *Cantharides*, Oyl of Scorpions and others. But Fifthly whereas some could not be cured by mercurial Medicaments, this is not to be ascribed

ascribed to the quick-silver, but rather to the ignorance of the Physician, who did not rightly apply this Medicine, or to the negligence or disobedience of the patient, or to the vehemency of the Disease, which could be overcome by no Medicine, though the best that is.

But as quick-silver is not wholly to be rejected, so we think it is not unwarily *When quick and rashly to be used, but only upon urgent necessity, to wit then when this dis-* *silver is to be* ease could not be cured with Guajacum wood or Sarsaparilla. For we must come *used in the* to the use of quick-silver for two causes especially, the first is when the Disease is *Venereal* so stubborn, that it wil not yeild to those usual Medicines: Secondly when there *Disease.* is something present, which doth not admit of the use of the Decoction of the wood and Sarsaparilla, especially the heat and inflammation of the Kidneys and Liver. And *Eustachius Rudius* writes *Lib. 5. Cap. 15.* that he hath cured some, who if they had used never so little of Guajacum, though corrected with cold things, were presently taken so with a heat of Urin, that an Inflammation of those parts arising, they have hardly escaped death; and therefore in such cases sometimes, wil we or nil we, we are compelled to make use of quick-silver, as the same *Rudius* speaketh; and that oftentimes may be done safe enough, so that he writes he hath anointed with quick-silver even infants infected by their Nurses at suck, and hath cured them.

Yet we must not come rashly and inconsiderately to this unction, but first of al *Things pro-* we must consider, whether there be any thing present that doth prohibit it: *hibiting un-* for first of al unction with quick-silver is not admitted, when the strength is but *tion with* feeble, and therefore in old men it seldom takes place. Secondly, if the body do *Quicksilver.* still abound with many vitious Humors, for then the quick-silver doth not easily penetrate: and by a commotion of the Humors it causeth grievous Diseases and Symptomes, therefore the body must first of al be emptied. Thirdly, if the Air be too hot, and if it be dog daies. Fourthly, if the body be extenuated, if there be a Feaver, Ulcers of the mouth, and inclination to a quintie; this kind of Medicine also is not convenient for them who before the French Pox, suffered numness, tremblings, Palsie, and pains in their joynts.

But that quick silver may rightly be made use of, we must first of al enquire *Whether* after what manner it is to be given, and what it can performe, and do in this dis *Quicksilver* ease, on which business the hinge of this controversie turnes. Where first of al we *be an Al-* are not of their opinion, who think quick-silver to be an Alexipharmacum of this *exipharma-* Disease. *Quercetan* indeed affirmes it in *Consil. de lue Vener.* where he writes *cum of the* that Mercury is the only true and sole Alexipharmacum of this Disease, especially *Venereal* if it be inveterate. From whom *Felix Platerus* doth not much dissent, who *Disease.* writes that Mercury by its occult qualities and propriety contrary to this disease, doth quel the Venenate quality of that disease, but this cannot simply be admitted, for when as there are three things in this Disease, first of al that Malignant quality imprinted on the parts dedicated to nutrition, and especially on the Liver, or an occult Disease; Secondly, vitious Humors, generated in the Liver evilly affected, and polluted by this Malignity: Thirdly, Diseases and Symptomes which are raised every where in the body by those vitious Humors, we do not deny indeed that Quick-silver may conduce somewhat to the Evacuating of the vitious humors, as shal be said here after, and hence also to the taking away of the Diseases and Symptomes which do arise from them; but that it doth overcome the malignant and virulent disposition it self, which is the property of an Alexipharmacum, is that which we deny. For first of al experience doth not confirm it, neither hath that Alexipharmaceutical vertue of Mercury been hitherto proved by any one, by any solid argument; but whatsoever it performes, it doth by salivation and violent purging, which is not the property of an Alexipharmacum, for otherwise al Medicines purging vitious Humors should be called Alexipharmaca. This rather is manifest; that some cured by mercurial Medicines, after a long interval of time

have relapsed into this Disease, that occult and Malignant disposition being left in the body. Secondly, that quick-silver is no Alexipharmacum, appears also by this, because 'tis no way friendly to our body, but rather hurts the brain, Heart, and other Members, and causeth most grievous Diseases and Symptomes in the jawes, which *Platerus* endeavors in vain to remove from Mercury, and to ascribe them to the virulency of the spittle. For thirdly, Quick-silver causeth salivation, not only in the French pox, but also in other bodies, which are not Sick of the French Disease, and besides hurts in the mouth, inflammation, Exulceration, Stinks, injuries of the Teeth, which is obvious for every one to experience and observe, but that is more consonant to truth, that quick-silver is to be numbered amongst Evacuating Medicines, whenas 'tis evident by experience, that by benefit of that, many thick, tough and virulent Humors are emptied by the mouth, sometimes also by sweat, or other waies, and that it doth not much good in this Disease, unless salivation ensue: therefore when it is applied, it can be used only for this end, to evacuate virulent Humors, which being emptied, whenas the Symptomes caused by them do vanish, 'tis concluded by many, that it may be administred for the Mitigation of the symptoms, when as yet it doth only mitigate or take away the Symptomes by accident, the virulent Humors, on which they depend, being taken away. Which cure notwithstanding, as *Fernelius* is of opinion, is the cruellest of al, and so hard, that many would rather perish of the Disease, than be cured with so great danger, so bitter hazard: but that quick-silver may be applied to external and contumacious Ulcers, is known to every body.

How many ways quick-silver doth Evacuate. But to evacuate vitious Humors it may be used three manner of waies; either to move by stool and vomit; or to cause sweat; or to cause Salivation and spitting. Concerning the giving of quick-silver to move by stool or vomit is already spoken before, and the Chymists are large in the praise of it; and do extol it with wonderful commendations: and *Crollius* calls Mercury the Balsome of Nature, in which there is both a vertue incarnative, and regenerative, which doth wonderfully renew, and purge from al impurities, and therefore calls it a divine Medicine: to whom *Beguinus* assents, who in *Lib. 2. Tyrocin. Chym. cap. 3.* writes that Mercury is the chiefest Alexipharmacum against al corruption and putrefaction: from whom though *Platerus* do not wholly dissent, while he teacheth, that this Disease may easily be cured by purging with Mercury, and truly in no long time, but very speedily, being scarce drank twice or thrice, from whence is raised a plentiful flux of the belly, and also vomiting, sometimes also sweat and Urin is provoked: yet he cannot deny, that it doth perform this by a violent irritation of Nature, and not without danger.

'Tis to be given warily. But I would have a Physitian rather timorous, than bold and rash in the use of this Medicine, for that which *Pliny* said was the poyson of al things; *Lib. 37. cap. 6.* that wil not spare mans body, but offends the stomach, Liver, Guts, and al the bowels, and is especially an enemy to the Nerves and brain: but though the Chymists affirme that being prepared it may grow more mild, and that it may not hurt, they precipitate it, subline it, and prepare flowers of it, *Aquilam, Aurum vitæ*, and other things; yet though you expel Nature with a fork, she wil stil returne: for as it was said even now out of *Platerus*, it purges violently and not without danger: and as *Fernelius Lib. de lue Vener. cap. 17.* writes of this business, upon the giving of prepared Mercury, (doubtless he meant precipitate) presently from the compass of the whol body, Humors of al sorts break forth upwards and downwards, with so great force, and so violent, that the spirits being exhausted, and the strength wasted, the sick do either die presently, or lie some daies without strength like unto dead men: sometimes al the mouth is inflamed, and contracts a Gangreen, putrid Ulcers and very stinking, and sometimes the jaws swell, that the Patient for some daies is not able to swallow at al: although sometimes it work more gently, yet it purges violently enough.

But if it do work more mildely, either it retaines the nature of that which is crude, or being fixt it doth almost put on the nature of a fixt mettall: of the first sort is mercurius dulcis, of which *Angelus Sala* saith in the riper aged it works little, unless it be given in a great dose, to wit thirty five grains, and then it easily raiseth salivation; and that this is true a certain Physician wel known to me, learnt to his cost and found it so by experience, as we have said *de consens. et dissens. cap. 18.* but if it be more fixt, it doth not move the belly; therefore it must needs be that it have a middle nature, if it ought to purge, that it may stimulate nature, where yet alwaies to hold that medium is very difficult. Yet amongst those medicines, we have nominated of prepared mercury, that which is called mercurius vitæ doth easily challenge the first place, so that I think it would be needless to make mention here of more medicines prepared out of mercury; but we must note this concerning mercurious vitæ, that it is no pure mercurial medicine, but there is contained in it some part of antimony as appears by the vitrum and Regulus, which may be made out of the mercurius vitæ, but can by no art be prepared out of mercury alone, but that they may be made of antimony is wel known.

Yet when we are minded to administer mercurius vitæ, and other mercurial medicines, we must diligently consider *Mesues* rule, that it is a graine of wisdom, not to come to strong medicines, but where weak ones wil not satisfy. If therefore this evil be new and gentle which may be cured by gentler purgers, and by the decoction of Guajacum or Sarsaparilla, we must not rashly come to the use of quicksilver. But if the evil be stubborn and inveterate, and there be many virulent humors in the body, mercurial medicines may be given without danger: for then 'tis not easily to be feared, that it should assail mans body, when it hath vicious humors enough to work upon. And oftentimes necessity compels us to come to the use of quicksilver, and some do hope in vain, to affect the same buisiness by weak medicines often repeated as by stronger taken plentifully at once. For experience hath long since taught us, that we do oftentimes spend our time in vain in such medicines given against pertinacious diseases. On the contrary that strong medicines, and amongst them quicksilver, after once or more times taking, have happily overcome pertinacious diseases, whose cause was about the stomach, the cavity of the liver, the spleen, pancreas, the cal, and from thence was communicated to other parts.

Secondly out of quicksilver are prepared sweating medicines, to wit the white spirit of mercury, or the white or red oyl of mercury, one drop of which or two, are given to drink in treacle water and spirits of Guajacum, or some such like decoction to move sweat, as also other preparations and fixt medicaments of quicksilver: and in case that quicksilver performe that, for which end it is given, and move sweat, and discusse the vicious humors by it, 'tis not so dangerous a medicine.

The third way is by Salivation, and many indeed do place al their hopes of the cure of this disease in Salivation, so that *Platerus* writeth, unless that in the cure by quicksilver Salivation be raised by the use of it. And at last be supervenient, the cure doth not succeed, neither is it fitting so much to condemne the use of it and wholly to reject it for the faults which happen in the mouth in this cure, or for other accidents, amongst which convulsions are chiefly to be feared, which are wont sometimes to happen, if there be any great error committed in the use of it, whenas afterwards in the cure the faults of the mouth are easily corrected again. On the contrary *Fernelius delue Vener. cap. 6.* doth exactly set forth this manner of cure and describes its inconveniences: so great saith he is the cruelty and harshness of this unguent, that the patient presently begins to languish the second or third day; for by its extraordinary tenuity it doth melt and dissolve, whatsoever is in the superficies and whole compass of the body, and at length by its extream cooling faculty with which it is endued, it drives them to the inward parts, from thence into the stomach and breast, from which afterwards it drives them upwards by a continuity of parts to the throat and mouth, with so great and so violent an injury, that the teeth, to which as also to the brain 'tis peculiarly an enemy

When it is
to be given
in the Vene-
real disease.

Sweating
medicines
made of
quicksilver.

Salivati-
on by quick-
silver.

emy, do in al presently, grow loose, and in some become blackish and al drop out. Some things it discusses out of the body by sweat, some by its purgative faculty it casts forth by stool, with a great deal of torture. And breifly to comprehend al, al certainly who are thus cured have their jaws exulcerated, their tongue and pallate swollen; their gums and teeth loose, and spittle run through their mouthes without any intermission, smelling worse then any stink, with so great contagion, that the lipps by touching of that contract ulcers; and the cheeks are ulcerated within: the stomach being cooled and disturbed with the stink, the sick are destitute of any appetite to meat, and being tormented with intolerable thirst, yet they are scarce able to drink, their whol mouth being but one ulcer. Besides their tongue stammers, their eares grow deaf; in some incurably. Al the house about stinks.

When un-
ction with
quicksilver
is to be used.

And indeed that manner of cure is bitter enough, that one ought not easily to admit of it, and therefore 'tis not to be used when the evil is new and light, but when 'tis inveterate and contumacious, and when other remedies as the decoction of Guajacum, Sarsaparilla, and the like, have first of al been tryed in vain; neither must we come to the use of that unless the body before be diligently purged, least too great a quantity of virulent humors be turned rushing to the mouth and jaws; neither is this cure convenient for old men, nor for weak bodies, nor those that are wasted, and are sick of a weakness of the nerves, and have weak heads, and subject to distillations, least by the quicksilver, it being hurtful for them, these parts be more debilitated.

Therefore as *Hercules Saxonia de lue. Vener. cap. 39.* writes of this subject, they are neither to be approved of who use mercurial unctions without any difference, neither must we hold with them, who wholly reject the use of them. For sometimes this disease is so contumacious, that 'tis not cured with the decoction of Guajacum taken fifty dayes, and twice or thrice a day, but grows worse; whereas therefore the patients are weary of taking any more decoctions, and also of sweating, and hungering, that they may not be left without al help, 'tis better to administer a dangerous remedy then none at al.

How quick-
silver doth
raise a flux.

But what way quicksilver doth raise salivation, Authors do differ, *Eustachius Rudius lib. 5. de morb. oculis. cap. 15.* disputes at large of this business, and first of al he worthily derides them who hold that quicksilver by its most intense coldness, or repressing faculty doth repel the humors from the external parts into the innermost parts of the body; for repelling thinges are of thick and dry parts but quicksilver is of most thin parts: neither do other repelling medicines, nay not the most cold ayre, or coldest water, performe any such thing; neither can here be given any reason, why the repulsion should be to the mouth, and not to other parts that are neerer. This therefore must be inquired, why quicksilver is moved to the head, and is cheifly purged through the mouth. Many are of opinion, neither doth that displease *Platerus*, that quicksilver doth cause spitting by a peculiar vertue: but he explains not the manner; neither doth this please *Rudius*. For saith he if quicksilver be moved to the head by vertue of its whol substance, and by a peculiar property, it doth that either by a similitude or contrariety of substance; it cannot be by a similitude of substance, because quicksilver doth rather hurt, then besfreind the brain and nerves: and therefore as cantharides do invade and offend the bladder, the Sea hare the lungs, so also in this manner quicksilver seems to assault the brain. But *Rudius* overthrowes that opinion two waies, first of al, because he hath proved before mercury, to be no poyson, secondly because he thinks he is able to render a reason from the manifest qualities, why quicksilver doth assault the head; where first of al, he supposeth this that mercury as opium hath heterogeneous parts and that 'tis made up of parts of a different nature, yet so, that the hot parts do predominate; and that 'tis compounded of an aery and earthy substance but very much attenuated with heat, which like unto smoak scarce enduring the heat, flies away in fumes and is dispersed. Therefore amongst al other medicines of this faculty it doth most powerfully extenuate the humors, discuss, and convert them to motion; and

and therefore doth purge by sweat, by stool, by the mouth, and so partly by its purgative vertue, partly by the heat of its thin parts doth draw the humors along with it, and that it happens so, that the thinner going to the skin are emptied by sweat, but the thick and unfit to be emptied by sweat, being extenuated together with the quicksilver turned into vapor are drawn up into the head and then causing distillations do fall down again; and at length he concludes, whenas quick silver outwardly anointed doth not remain in the stomach, as other purging medicines do, but assails the head; 'tis no wonder if it principally purge by the mouth.

But indeed he doth not this way satisfie the doubt, and this is a great peice of ignorance both in things phylosophycal and Chymical. For first of all that Quick silver cannot be cleared from venenosety, was said before, and proved, and the reasons for the contrary answered. And *Rudius* himself in the chapter even now alledged, reckons up so many and so greate evils, which mercury doth cause, that they cannot all be reduced to manifest qualities: which that I may compendiously reduce, Quick silver hath a corroding faculty, causeth a trembling and weakness of the heart, hurts the animal faculty, weakens the substance of the nerves and their proportion unity, whence are raised incurable tremblings and greivous torments, and many using of mercurial medicines, have suffered convulsions, falling sickness, and apoplexy. Nay the same *Rudius* reports that some after unction have fallen into raving and madness: but whereas he endeavors to reduce that operation of mercury by which it causeth salivation, to the manifest qualities in that he laboures in vain, for first of all there are no such heterogeneous parts in mercury as he phantasies, as was said before, neither could any Chymist ever yet show them, and whether Quicksilver be burnt, or whether it be reduced to water, or what other external forme soever it puts on, it retaines its whole essence, and with a litle labour may be reduced to its ancient forme. Besides *Rudius* renders no reason, why Mercury outwardly anointed on the body, is rather moved to the head then to the stomach, and carries the humors thither with it: for whereas he thinks, that it is resolved into vapour and carried up into the head, tis false, whenas it may be collected whole both in the mouth, and in other parts.

The hurts
of Quick
silver.

'Tis more agreeable therefore to truth, that quicksilver is offensive to the nerves and brain, as the tremblings which it causeth do sufficiently demonstrate, and therefore that it creeps up by the nerves to the brain, and carries the vicious humors thither with it, which together with the vicious humors whenas nature and the expulsive faculty of the brain doth expel, and cast down to the jawes, hence follows salivation: and quicksilver whether outwardly applied, or inwardly taken, still creeps up to the head, and causeth much spitting.

Quick silver
an Enemy
to the nerves

But there are divers wayes of using Quick-silver to raise a flux, to witte either 'tis outwardly applied to the body by unguents, plaisters, epithems and lavatories so called, by a girdle, by bracelets and Rings, by suffumigations; or 'tis taken inwardly, by all which ways notwithstanding there is nothing else done, but that the Quick-silver may be reduced into the smallest parts that it may the easier penetrate into the body yet what way soever 'tis broke into peices, it keeps its nature, and the least parts are easily again united to one another and returne to their ancient corpulency, that it hath bin observed, that sometimes a great quantity of it hath bin collected in the veins, and cavities of the bones.

The wayes
of using
quick silver

Yet the most common way of applying Quick-silver is by unction; but that unction may be performed rightly, sometimes are to be observed before unction, some in the anointing, and some after unction, before unction the body, if need require, must be emptied either with purging medicines or bleeding: for if very many vicious humors abound in the body, 'tis to be feared, that by the use of these unctions they rush together in a heap to the jawes and suffocate the patient, or being rapt up to the brain do cause an apoplexy, or pallsie, and therefore first of all part of them ought to be emptied. Also if there be plenty of blood, least the patient may suffer

How the
unction
with quick-
silver is to be
ordered.

suffer an inflammation of his jawes or a feaver, tis good to take away a little blood. *Falopius* also, that part of the matter may be consumed, the bowels strengthened, and not be offended by the Quicksilver, gives the decoction of Guajacum eight or ten dayes before unction.

*How Quick
silver is to
be prepared.*

As concerning the unction it self, the basis of these unguents is Quick-silver, which must be chosen pure, or vivified by cinnabar, and it must be mixed with hogs-grease hens-fat, butter, oyl, turpentine that it appeare no longer quick to the sight, which is commonly called mortifying of it. Some also ad to six ounces of Quicksilver, four ounces of red sugar. Some do mix divers other things to correct the malice of Quick-silver, and indeed this or that according to the different constitution of the disease, which notwithstanding profit little. For those oyley and unctuous things, or other things, do stick on the skin and superficies of the body, and cannot follow the Quicksilver into the innermost parts of the body, nor correct its malignity. But those things which are necessarily mixed, are mixt, to that end, that the quicksilver may be reduced into the smallest bodies and so may the easier insinuate it self into the body. Some also in the composition of this unguent, think we ought to have respect to divers things: and therefore *Hercules Saxonia*, if there be hard knobs, ads those things which do mollifie, as the fat and grease of geese, ducks, the Marrow of oxe bones, butter, oyle of sweet almons; if there be ulcers he bids us ad drying pouders, Franckincense, Myrrh, aloë, Licharge, white lead, which if they be il conditioned, he ads Cincabar precipitated. Besides he commands us to mix medicines, which strengthen, the parts: more over he bids us ad those things, which do respect the principal parts, and those that are most hurt, and therefore if the joynts be affected he bids us ad ground pine; if the liver, hepatick means; if the stomach, things stomachical. But besides the rest he doth approve of oyle of Guajacum added to the ointment; al which as we do not wholly disallow of, so they ought to be explained. First of al, if the unction be ordered cheifly for tumors or ulcers, medicines may commodiously be mixed with it, but if salivation and emptying by spittle be cheifly intended there is no need of that laborious composition. Secondly Quick-silver it self if it be reduced into smallest parts, doth easily penetrate, neither hath it any need of helpers, and there is nothing that can penetrate easier then that. Thirdly I can scarce be perswaded, that medicines outwardly anointed, can penetrate to the stomach and liver, and strengthen them; this likes me best, that he thinks oyl of Guajacum ought to be added to those unguents.

The quantity.

The Quantity of Quick-silver that is used, is sometimes more, sometimes less, according to the vehemency of the disease, and the patients strength. Yet we must not exceed seven ounces which is sufficient for strong bodies, in weak bodies tis sufficient to use three foure or five ounces; but every time use two or three ounces; of the unguent, or for every dose take two scruples; in tender children for every place so much oyntment as is the bulk of a lentil is sufficient. Such oyntments therefore may be made thus.

*Formes of
Mercurial
Unguents.*

Take of mercury six ounces; of hogs-grease without salt one pound; Kil the Mercury with the grease and mix it exactly, then ad of the marrow of an ox leg half an ounce; of Turpentine three ounces; of the oyl of it one ounce, of the oyl of Guajacum two ounces; mix them.

Or Take of venice Turpentine one pound, of Quick-silver seven ounces; mix them diligently, then ad of hogs-grease eight ounces; oyl of sweet and bitter almonds of each two ounces, powder of cinamon two drams; Musk six granes mix it and make an ointment.

Eustachius Rudius commends this form, which he used with most happy success for many yeares at Utcine, in the great hospital of that City, with so much safety, that not one of them perisht which he had in cure.

Take of Quick-silver one ounce and half; Fresh Sows grease three ounces; powder

pouder of mastick one ounce; oyl of mastick one ounce and half; Saffron half a dram; two Sweet apples of a middle size. First of al let the sows grease be most exactly mixed with the mercury, then ad the mastick finely powdered together with the oyl of mastick and Saffron, and afterwards the aples through ripe cleansed from the parings and core.

Or, Take of mercury killed with spittle three ounces; old oyl four ounces; of Frankincense prepared as common mastick two ounces, mastick one ounce; hogs-greese two ounces and half; oyl of bayes one ounce and half; virgins wax two ounces; ointment of dialthea one ounce and half; sagapen one ounce; of wax as much as is sufficient. Make an Ointment.

Or Take of mercury two ounces; of hogsgrease three ounces; turpentine one ounce; pouder of orice frankincense, mastick each two drams; oyl of chamemel, white lillies, bayes of each two ounces; Stirax half an ounce; mix them.

Or Take of hens, hogs, and beares greace each one ounce; oyl of white lillies, bayes each two ounces; mercury six ounces; mix the greases in a mortar, afterwards ad the mercury, and stir them an houre in the mortar, then ad of frankincense mastick, myrrh, amoniacum, stirax, pouder of Arabick, lavinder each half a dram make an ungnent.

The Places which are anointed are the joynts and the spaces between, and the less fleshy parts in the hands, elbows, feet, knees, sometimes in strong bodies the emunctories of the liver are anointed, and the backbone. Fallopius expects the hands, and first of al anoints the feet transversly about the begining of the feet, afterwards the spaces between the joynts of the leg, then the middle of the thighs, the middle of the Elbow bones, and the middle of the Armes, afterwards the whol back.

The most commodious time for anointing, is the spring and autum, the winter and summer are less convenient and the unction is to be performed in the morning, upon an empty stomach, in a close and warm place, beginning at the lower parts, and so passing to the upper unction is seldom ordered twice on the sameday.

The patient anointed must either be ropped up in linnen, or the parts anointed be covered with course flax or hemp and so the patient be placed in his bed.

But the unction is to be continued so long, til salivation or a loosness, or some other evacuation succeed; and the symptoms be lessened and cease; and truly if a loosness follow, it is not suddenly to be supprest, yet we must have a care lest the guts suffer any hurt, casting in by Clyster chaly beat milk, or the juyce of pti-
 ing. How long unction is to be continued.

Some think that sweat all ought to be moved; but if nature tend to salivation, tis not convenient to move sweat, least there be contrary motions caused; but if nature of her own accord tend to sweat, tis not to be hindered, yet unction is scarce to be continued above three dayes at one time; sometimes also there presently follow greivous symptoms as great ulcers of the mouth, swellings and inflammation of the tongue and jawes, the swallowing is hurt, the teeth loosened, an extraordinary flux of virulent humors from the mouth, a diarrhy or dicentery, and then we must presently forbear anointing, yet sometimes it hapens but very sildom, that no such greivous symptom followes. But only sweats, and pustles are mulceplid al over the body.

When unction is now perfected, and the spicle runs wel, let the parts anointed be washt with wine, in which sage, Arabick, lavender, flowers, rosmary, grownd pine, bayleaves, calamint origanum have bin boyled, afterwards lay upon them some plaister for the nerves.

At last when the unction is past, we must use our endeavor, that the mercury be not left in the body, and that no evil be contracted neither in the mouth nor other parts; and therefore we must move sweat in a Laconick bath keep gold money in the mouth, shaveings of gold must be dranke, or bullets or pills made up of lease gold must be swallowed: for the mercury is imbibed by the gold, and with it is emptied out of the body, and so al evil that might happen is prevented.

To

To assuage pain, the mouth and jawes must be washed with warme milk or the Decoction of Barley: to hinder inflammation let the patient use the decoction of plantaine water, or of Vine leaves, with the syrup of Mulberries and dry roses, the teeth must be washed with the decoction of sage, or with Sage, columbine water, or austere wine; after unction we must not presently desist from the cure, but the decoction of Guaiacum as being the alexipharmacum of this disease, must be drunk still for certain days, which if it be intermitted, a relapse is wont easily to follow upon it.

*Mercurial
plaisters.*

Secondly, emplasters made of mercury are wont to be applyed in this disease, which though they cause leiss trouble, yet they are leiss effectual to empty by spitting. They are prepared of the same matter of which the ointments are, to which also we may add cinnabar: but quicksilver either is mixt with usual plaisters, as diachylum Treacum, melilot, or new ones are compounded. The plaister called de ranis with mercury, is also in use. These plaisters are spread upon linnen cloth, leather, and are applyed to the same places as the ointments, especially to the hands and feet, also to the eminencies, and sometimes to the back bone, and they are worne continually night and day, and every third or fourth day are renewed: this cure is leiss troublesome, and upon faire daies the patient may go abroad, yet the cure is not so perfect, and therefore must be continued longer.

*Lavatoris
of mercury.*

Thirdly, Linnen clothes wet in mercury water, are applyed to the same places in the forme of an epitheme, and because sublimate is most commodiously dissolved in water, the same places which are wont to be anointed, are besmeared with mercury dissolved in this manner, which medicines are commonly called lavatories, which are prepared of mercurius sublimate one ounce, which is dissolved in two pound of some liquor.

For Examples sake.

Take of Mercury sublimate one ounce; of Scabious, Rose, Fumitory water, each eight ounces; Sage water four ounces. Let them boyl and be mixed.

The use of it is this, with a cloth wet in this liquor, let the knees and feet be besmeared, and the armes from the elbow towards the hands, and that must be done in the morning and towards the evening, in a warme place and continued for ten days, til spitting follow.

*Mercurial
girdles and
bracelets.*

Fourthly, Girdles and bracelets are made of Mercury killed with spittle and mixt with the white of an egg, which mixture is spread upon cotton, and that is sowed into leather or cloth, and of that girdles or bracelets are made.

*Suffumi-
gations of
mercury.*

Fifthly, Also this disease is cured by suffumigations made of quicksilver, but this way of cure is more dangerous than that by unction, nay it hath been deadly to some, and therefore is not to be made use of, unless all other meanes have been tried in vain, and only on very strong bodies; for this way of cure is very violent, whenas the patients that do admit of it, every day are wont to voide ten pints of virulent spittle; but it takes not place in those that are weak, wasted, endewed with a hot and dry distemper, nor in those, which are troubled with a difficulty of breathing, or are subject to distillations from the head on the breast, or who spit blood, or are taken with a lientery, or dysentery: but physicians do chiefly use those suffumigations in a contumacious French ophthalmie, and upon an imminent shedding of the haire, which cannot be hindred by other medicines; for this suffumigation doth fasten the haire. Yet then a particular suffumigation may be appointed.

*Their dif-
ference.*

For we must note here, that there is a difference of suffumigations in this disease; for some are universal which are received by the whol body, and therefore also do empty the whol body; others partitular, which are applyed only to certain parts: again some suffumigations are prepared of benigne medicines, as frankincense, myrrh, oyl, Cinamon, Styrax calamite, spikenard, Amber, Ammoniacum, benjamin, wood of aloes, Amber greece, Musk, Gallia moschata, and the like, which though they may be fitted for the use of certaine parts, yet they do not destroy the venereal disease. Those

Those therefore which are proper to this disease, are chiefly prepared of mercury and of those things made of Mercury, cinnabar, Mercury precipitate, sublimate.

As concerning those universal ones, their basis as was said even now, is mercury any way prepared; some ad the Greeks Sandarach, and yellow arsnick, but whenas they are most pernicious poysons, they are not safe enough applyed, neither do they cure this disease in particular that we may give you some formes.

Take Of *Facitious Cinnabar* three ounces; Myrrh, Frankincense, Mastick, each one ounce; Liver colored aloe, Styrax calamite, Benjamin, each half an ounce: make a powder. Formes.

Or Take of Cinnabar three ounces; Myrrh, Frankincense, wood of aloe, Laudanum, Ammoniacum, each one ounce; mix them with turpentine, make pills.

Or Take, of Cinnabar three ounces, Mercury precipitate three drams; Frankincense, Aloe, Mastick, Myrrh, Benjamin; Styrax Calumite, each half an ounce: make a powder. Epiphanius Ferdinandus reports the following forme is much in use at Naples in the Hospital for those that are incurable.

Take, of Litharge five ounces; of antimony, Cinnabar, each one ounce; of Pontick Rhubarb six ounces; Polipody of the oake three ounces. Sweet cane, Cinamon, Laudanum, Roses, Mace, Nutmegs, Alum, Verdegreece, Aloe, each three drams; Red lead, the Greeks Sandarache, each one ounce. Gumme caranna, two drams; Water of Roses and Citron Flowers, as much as is sufficient, mix them according to art.

But it seemes to me to be a forme made up without al reason which containes many things unprofitable, and also hurtful.

That is safer which Ferdinandus himself proposeth.

Take of Cinnabar, Mercury sublimate each one ounce; Gumme of the Olive tree Laudanum each half an ounce; Nutmegs, Bay and Juniper berries, each three drams; Marjoram, Coppras one dram and an half; Turpentine as much as is sufficient to incorporate it, make a mass.

But those medicines whether they be reduced into pouders, or pills or trochisks, are used after this manner: first of al the patient that he may be able to undergoe this cure (fit sauce for him, and they are deservedly thus handled, who defile themselves with lust) you must give him two reare eggs, a morsel of bred dipt in strong wine, and a draught of wine, and a spoonful of conserve of roses; then let him rest quiet for a quarter of an houre; in the interim let that Venereal bed, or rather prison, viz the sweating place be heated, and in that hot house or dry bath prepare a tent, or a pavilion of thick linnen cloath, under which the patient may sit naked in a low seat; under the same pavilion place a pot or vessel full of burning coales, on which by degrees cast either the powder, or the pills, or trochisks, that the fume from thence may be disperfed through his whol body, and be received by the naked body of the patient; when the smoak abates, strow fresh water on the coals, and continue so doing for a third or fourth part of an houre, for half or a whol houre, as the strength of the patient can indure it. For we must carefully observe, that the patient faint not, which doth often happen; if it be collected by his stammering speech, he must presently be taken forth and be refreshed with sitting medicines. But that faintings may be prevented, the patient may be permitted to draw the cold ayre by intervals through a reed, and put forth his nose without the pavilion. The manner of preparing these suffumigations.

But these suffumigations are applied either once or twice a day and indeed for three, six, or nine or more daies, according as the purgation doth sooner or later succeed, for when this comes, or a loosness, we must presently cease from the suffumigation. After the patient hath sweat sufficiently under his tent. Being wrapt up in linnen he must be laid in his bed, that he may there continue his sweat for an houre or two.

But particular suffumigations are not applyed to the whol body, but only to particular parts. Particular suffumigations.

parts exulcerated or affected with pain; but then Salivation is not moved, neither is that the intent, but it is used only to take away diseases and symptoms in the external parts, viz. for the falling of the haire suffumigations are applied to head; to the hands and Feet for their paines, and when they suffer Chaps and Clefts.

Internal Medicines causing Salivation. Last of all also a flux may be raised by taking Quick-silver inwards which though it was not known to *Fernelius*, yet it hath been taken notice of by the more modern, and Quick-silver is used to this end by *Rondeletius*, *Platerus*, and others. Such are those Pills called *Barbarossa* which have Quick-silver in them; but Physicians give Pills made of Mercury so, that at one dose there is given six or seven grains of Mercury, and they give them almost every day, and so long, til a flux followeth, and this cure they continue for thirty daies. Yet *Platerus* admonisheth that this kind of cure is not easily to be admitted, and not unless the Disease be inveterate, when other Medicines premised availe nothing. He also thinks that it is commodious, if it be presently cast forth by stool either by its own weight, or by the admistion of other things; but if that be done, doubtless it wil not cause Salivation; therefore 'tis better that Mercury what way soever prepared, be given in a less dose, than can cause purging either by vomit, or stool: viz. that the half, or third, or fourth part only of that dose be given, which otherwise is wont to be given to purge. For example sake, precipitate or Turbith Mineral is wont to be given at other times to vomit or purge to the weight of six grains, but if only three, or two, or one be given, by the continued use of it a flux is raised: and therefore he that would use such Medicines, shal do very right, if first of all he give the full dose of the Mercurial Medicine to purge, the second day half so much, the third day a third part, the fourth day a fourth part, and continue so, til the spittle run, yet he need not so precisely observe it: and tis altogether safer in this disease to give those Mercurial Medicines, which do not move the belly with great violence, nor so great danger, yet by their continued use do provoke spitting.

CHAP. XXII.

Of the Diet to be observed in the Cure of the Venereal Disease.

Diet. The Air. **A** Diet in the cure of this Disease is strictly to be observed; first of all let the Air in which the Patient is conversant, be hot, that insensible transpiration may be free, and sweating be not hindred, but rather promoted, yet not so hot, as to make faint. Therefore if need require let the patient keep himself in a warm chamber the whol time of his cure, and let not him expose himself to the free Ayre, unless it be somewhat hot by reason of the season of the year, and then not before noon. Yet they whose course of life wil not allow them to keep at home, let them guard themselves with Cloaths against external cold, and as much as they can shun the cold Air.

The Meat. As concerning their Meat, there is much discourse indeed every where in this Disease. **Whether a slender Diet** concerning a slender Diet: but whenas a slender Diet is that which doth in some sort impair the strength, or which doth little preserve the enfeebled strength, such diet is only convenient in acute diseases, which whenas they last not long, the strength also somewhat debilitated is able to hold out to the end of them: but whenas the French pox is a Chronical disease, and the Cure is extended for many weeks, if the strength be dejected by a slender diet, it cannot hold out till the end of the disease. But that Physicians do chiefly feed their Patients with bread and raisons, I think this is the cause, because they would give the most simple food, and that of good juyce: for whenas variety of meats doth easily supply vicious humors, and flesh, and fish, and the like meats are more easily corrupted, then bread and raisons they

they prohibit the sick variety of meats and flesh, and would have them contented only with bread and raisins: therefore that course and form of diet is to be observed which may suffice for the conservation of strength, though not to encrease it, but must no way oppress Nature. The meat also must be of good juyce, and simple, and which no waies affords matter for the generation of excrements, nor may call away Nature from resisting the Disease to the concoction of that. And therefore the patient must not be allowed above two dishes, and meat must be given but twice aday; therefore when the sick is prepared for the use of Medicines, let his diet be such which may not impair his strength, but rather preserve it, nay, in some sort encrease it, that the patient may afterwards be able to undergo the evacuations that shall be ordered, and a more slender diet: but when Sweaters or Quick-silver is administered, if the strength wil bear it, we must use a more spare diet, lest the vertue of the Medicines be hindered by plenteous nourishment, and let the superfluous humors in the body be rather wasted, than heaped up, and let the passages by which they ought to be expelled, be al kept free and open: but let not the diet be too slender, lest the strength fail, but be able to hold out til the perfect cure of the disease, which is wont to be long first; and though somewhat is to be bated of the accustomed diet in the cure of this disease, yet that is not to be done presently at the beginning, nor that change is not suddenly to be made; but the first eight daies by little and little, somewhat must be subtracted from the accustomed diet; as also the last eight daies of the Cure, by degrees he must return to the former course of diet; yet we must alwaies have respect unto the strength, and diligently consider what that is able to endure, and we must have a greater care of that, than of the disease, as without which the Cure cannot be perfected.

But how much concerns the quantity of the meat, we must also respect the strength, and the disease; for by how much the strength is stronger, by so much 'tis able to suffer the less quantity of meat; but the strength is demonstrated by the habit of the body, the temperament, custom, the age, season of the year, the Country, and condition of the sick; of which we have spoke in its proper place. In brief, as much as possible may be, somewhat must be bated of the accustomed food, which also the people of *India*, from whom the manner of curing this disease was derived to us, are reported to do; yet so, that alwaies respect be had unto the strength: For if the patient be strong, his Body of a cold constitution, that he can easily endure hunger; flesh is not to be given any more after eight daies, but the patient must be content with bread and raisins: but if the strength be weak, the body slender, cholerick, some flesh also may be granted, viz. the flesh of Chickens, Hens, Partridges, Veal, Kid, and tender weather, as also Hens Eggs: but Hogs flesh which is hard of digestion and distribution, and doth encrease the morbidick matter, is chiefly to be eschewed; as also corruptible Fruits, and soft fishes: and truly the most commodious Food in this disease, is raisins, and to be preferr'd before al other meats: besides, they do not easily putrefie, and they afford good juyce and nourishment, and correct the malignity of the vitious Humors; whence some are of Opinion, That Raisins in this Disease are not only meat, but medicine too; and especially those greater ones called *Cybebe*, are most profitable, in which there is greater plenty of nourishment, and a more absterfive and strengthening faculty.

Concerning bread here is some doubt; many commend Bisket, nay admit of that only, which as we do not disallow of in strong bodies, which are moist and abound with flegm and excrements, being inclined rather to putrefaction, then adust, and in those who have strong teeth, and are accustomed to it: so also Bread once well baked, and not too moist, may safely be permitted, as a nourishment most familiar to al Natures, Sexes, Ages and any season of the year: neither must we cause any trouble to the patient, by forbidding common bread, if he desire that rather then Bisket: nay Bisket seems to have its discommodities; for it staies longer in the stomach, and is not so easily digested, and for the right digesting of it there is need of a greater strength of the stomach, which notwithstanding for the most part in

*What kind
of bread is
to be given.*

those that are sick of the French Pox is very languid: besides whenas in those sick of the Venereal Disease for the most part adust Humors do abound, by Bisket they are increased, on the contrary by common bread as being more moist they are made temperate, and at length more nourishment and good blood is afforded from it, as being best tempered, and in meats that which is best tempered, is to be preferred before that which is intemperate.

Many also do weigh out the quantity of the meat, and write that at one meale, four cunces of bread, and two or three ounces of flesh wil suffice; but this cannot be so accurately observed in al men, but here there is no final regard to be had to Natures and custome.

Their drink

As concerning their drink, Authors also do not fully agree concerning that, some think nothing is to be given for drink but the decoction of Guajacum and Sarsaparilla, and wholly forbid wine; and think tis as much to be denied in this Disease, as in a pleurisie, and are of opinion that wine is not so much as to be tasted of, the whol course of the cure; and *Fernelius* writes that wine is so averse to Guajacum, as tis to Hemlock, *de lue Vener. cap. 13.* But for this cause chiefly they forbid Wine, because the body and Humors which before were adust, and which grow hot by the use of Guajacum, by the use of wine are inflamed. But indeed this reason seems not sufficient; for that Second decoction may heat as much, as wine, if it be thin and dilute and moderately drank: therefore the strength is here to be considered, and whenas wine hath a notable agreement with our body, and doth strengthen the heart and al parts, and especially the stomach, is most easily distributed into the whol body, doth most speedily nourish, and so fortifie Nature, that it may the better be able to oppose the Disease; the use of it is not simply to be rejected, especially in those who are less hot, and have a flegmatick body stult up with crude Humors; yet the use of wine is so to be moderated, that it do no way inflame the body; but those that can abstaine from wine without any hurt, let them drink that second decoction made of Guajacum and that plentifully at meals, and other times, when they are thirsty, yet they to, may sometimes take a draught of wine to strengthen the stomach. After the same manner if the Cure be ordered by Quick-silver, at that time when Evacuation is not yet made by the mouth and spitting, and the patient can chaw meat, he must be nourisht with the best bread and good flesh, and dilute wine must be given him: but when Salivation begins, and the Patient can chaw no longer, by reason of the looseness of his teeth, he must be nourisht with suppings, and Barly Ptisan, and flesh broaths with bread in it, and whenas an Inflammation of the jaws is feared, he must abstain from wine. But after the cure is finisht, though the Patient may reurne to his accustomed Diet, yet tis most convenient that he be nourished with meats of good juyce, from which the best blood may be generated; for whenas the body is extenuated, and the veins emptied, we must wholly take care, that the body or Vessels be not filled with vicious blood, but tis commodious that they be restored and filled with good. Neither must it be granted, that upon recovery he presently arise from a smal quantity of meat, to a great, whenas a change to extreames is dangerous. And when it may be feared, that the Liver be heated by the use, of hot and dry Medicines, conserve of Roses, Violets, the pouders of the three saunders, Diarrhodon Abbat. must be given for some weeks; and let the courses of diet, especially in Summer time, be cooler, provided chiefly of Barley, the Whey of Goats Milk also is good. But if there be any fear, that some reliques stil and Malignant disposition of this disease be remaining in the body, give a Physick wine made with Guajacum and Sarsaparilla which is most commodiously prepared at vintage time, if to every Gallon of wine one pound of Guajacum, and three ounces of Sarsaparilla be added, and let cool with the new wine after the accustomed manner; but out of vintage time those Medicines may only be steeped in Wine.

Wine of Guajacum.

Sleep.

Sleep is not only convenient in the night, but also a day times, when the Patients sweat, it may be granted.

Al violent exercise is hurtful; for whenas the strength is impaired by it, there is a greater transpiration and dissolution of the body, thence it comes, that the patient cannot be content with that smaller portion of nourishment, which is wont to be used, in this Disease. But he must wholly abstaine from enery, as the greatest enemy to this Disease: let sweating in his Chamber instead of exercise, and frictions which may be done with the same labor when the sweat is wiped of: let the affection of his mind be composed to mitth.

We must use our endeavor that the belly be kept loole, and whenas by reason of the smal quantity of meat it is wont easily to be bound, it must be loosned with Clysters, and Raifons with leaves of Seny; nay by intervals to give some purgers is not only profitable, but also necessary: for though those Laxatives do empty the first passages, yet because they reach not to the more distant places, and by sweaters only the thinner parts are Evacuated, but the thick are left behind, tis good after seven or ten daies, or after a longer space, or need requires, to give a purging Medicine agreeable to the body of the Patient.

CHAP. XXIII.

Of the Cure of the Diseases and Symptomes, which are wont to be joyned with the Venereal Disease.

WHENAS divers Diseases and Symptomes are wont to be joyned with the Venereal Disease, some are very large in explaining, what way those Diseases and Symptomes ought to be removed: but whenas those Diseases are for the most part manifest, and we have treated of their cure in former Books, I think it not worth my pains to treat at large of them in this place: and therefore I shal only alleage certain few things, and those principally which are proper to this Disease, let the rest be fetcht from their proper places.

Ulcers.

As concerning the Ulcers of the Yard especially, which are very common in this Disease, we have spoke of them in general *Lib. 3. Pract. Part. 9. Cap. 11.* that we may add a little, the Root of the Yard being guarded with a defensive Oyntment, the Ulcer must be washt with the Decoction of Scabious, Horehound, and especially Soape-wort, and Guajacum: afterwards let the Ulcer be anointed with some convenient unguent; those Oyntments are chiefly profitable, which have Mercury in them, either a live, or sublimate, or precipitate, or Cinnabar. And in Ulcers of the Yard, and rottenness of the Nut, as they speak *Hercules Saxonia* writes there is no Medicine yet found out more profitable then precipitate: yet it ought not to be applied, but where there is a thick filth, but in clean Ulcers tis not to be used *Eustachius Rudius Lib. 5. de Morb. occult. Cap. 19.* commends two Oyntments especially. The first is:

Take of Oyl of Roses, sweet Almonds, of each half an ounce; Oyntuent of Roxin (which is made of pure oyl, Roxin of the Pine, Turpentine, and Yellow Wax) six drams; Mercury Precipitate, one dram; a little Wax. Mix al over the fire, except the Mercury precipitate, and taking them of the fire stir them carefully, til they are cool, then add the precipitate; yet according to the Nature of the Ulcer, and the part affected with it, you may add more or less of the Mercury precipitate.

The Cure of Venereal Ulcers in the Yard.

The

The other is this.

Take of Oyl of sweet Almonds, Oyntment of Roses, of each three ounces: new wax, one ounce: Mercury precipitate half an ounce. Mix them.

And these Oyntments are good not only for the Ulcers of the Yard, but for French Ulcers of other parts, for the Disease called Ficus, swellings in the Fundaments, and Crusts.

The Balsame of Mercury also is good, which is thus prepared.

Take of Quick silver dissolved in spirit of Nitre, to one pound of this dissolution, pour of Oyl of Olives, three ounces. Let them stand and digest eight daies, afterwards separate the oyl and keep it for your use.

Or, Take the Yelk of one Egg boyled hard, Honey one ounce. Mix them over a gentle fire, let them boyl, and add of Mercury Sublimate, half a dram.

After mundification this Oyntment also may be used.

Take of the best aloe, half an ounce; Crocus Martis, two drams; Frankincense, red Lead, of each one dram; Honey, half an ounce; Turpentine, two drams; the Yelk of an Egg. Mix them.

Hidden
Ulcers.

But occult and hidden ulcers are wont to lie hid either bound up under the fore-skin, or else are in the internal passage of the Yard; if the Ulcer be under the fore-skin contracted, either a convenient medicine is to be injected by a syringe, and afterwards a rent dipt in oyntment is with a probe to be applied to the part affected or the fore-skin must be cut long waies, and necessary Medicines be layed to it.

Ulcers in
the passage
of the Yard.

But if the ulcers be in the very passage of a mans Yard, they are hard to be cured, and have caruncles joyned with them, or fleshy excreffences, which hinder the emission of the urine, therefore in a slight ulcer, we must inject Plantane water, in which Alum, litharge, and white Lead have been boyled, but in more grievous ulcers use this Liniment.

Take of Mercury precipitate, one ounce; Mercury sublimate, one dram; burnt lead, two drams. Grind them on a Marble stone, wash them often with Rose-water, and let them dry in the shade. Afterwards take of Hogs Fat, six ounces; White Wax, two drams. Let them be dissolved over the fire, and add the powder, and two scruples of Camphire. Make a Liniment, which must be besmeared over a Candle made of five ounces of White Wax, and one ounce of Turpentine, and let the Candle be put up into the Urinary passage: or let some convenient plaister wrapt over a smal probe, be thrust in: the Caruncle being taken away a drying and consolidating oyntment must be cast in.

In the womb

But if there be an ulcer in the womb, and that sordid and creeping, the evil is incurable: but the slighter are cured by injections of Alum waters, in which Guajacum and Sarsaparilla is boyled, or with pessaries of the juyce of Plantane, with powder of Aloes, Bole Armenick, white Lead and the like. In a very sordid ulcer the Oyntment Ægyptiacum may be added, or some Mercurial unguent: and at last a drying and consolidating Oyntment may be used, as that of Tutty, or the like.

In more grievous ulcers suffumigations of the Womb are most profitable, but whenas the Pipes are overheated by the coals, these candels of Hercules Saxonia are good for a fume.

Take of Styrax, Calamite, Beniamin, of each six drams; wood of Aloes, seven scruples; white Frankincense, one ounce; Ladanium, one dram and an half; Orrice, Cloves, of each two drams; Damask Roses, six drams; Cinnabar, two drams; coales of Willow, half a pound; Aqua Vite as much as is sufficient. Make Candels.

By the same Medicines the ulcers of the Guts are Cured.

Ulcer of the
Jaws.

But to the ulcers of the jaws whenas such Medicines cannot be applied make a Gargarisme of the Decoction of Sarsaparilla, the bark of Guajacum, the Leaves of

of plantane, scabious, mittle, red roses, pomegranate pil, sumach, to which ad a little alume the decoction may be made in water, and towards the end ad a little austere wine; after they are washt, the ulcers must be clenfed with oyl of sulphur, adding a convenient liquor, or the compound water of alum, which is thus prepared.

Take of mercury sublimate, rock allum, each one ounce; Grind them on marble The com- stone, then ad to them juyce of Lemons three ounces, plantane water one pound and pound wa- an half; rose water nine ounces; Boyl them in a glass to the consumption of the fifth ter of alum. part.

But you must have a care, that no part of such medicines be swallowed down; but- ter of antimony so called is very efficacious, if the ulcer be gently touched with a piece of cotton moistned with the butter; but there is need of the same caution here: but whenas it cannot alwaies be prevented, but somewhat wil slide into the stomach, and so such medicines cannot be given safely enough; but on the contrary, other more gentle medicines are of little efficacy, these ulcers are hard to be cured, nay oftentimes are incurable; the solution of gold is more safely applied to these ulcers, prepared after this manner.

Take fifteen leaves of Gold, rock alume, nitere, Salt, each one ounce; grind them on marble, and poure to it some drops of spirits of vitriol; afterwards poure on it spirits of wine two fingers bredth above it, and let them stand in warm ashes, last of al boyl, that the leaves of the gold may be dissolved, and the spirits of wine grow yellow. Seperate the Spirits of wine by distillation, then poure more on again and digest it, and do this so often, til the spirits of wine dissolve the gold, and the salts be left at the bottom; at last seperate the spirits of wine by distillation till it is dry, and pour on spirits of turpentine and digest it eight dayes in a warm place, till the gold be dissolved, with this solution wash the part affected twice every day.

Ulcers of the nose are cured by errhines, or infusions, by pouders strewed on it, Of the nose; by suffumigations made of Guajacum and cinnabar.

Clefts of the hands and feet.

If there be chaps and clefts in the palmes of the hands and soles of the feet, let Clefts of the them be washt with the decoction of Guajacum, its barke, scabious water, german- hands and der, cinquefoile; and if there be hardness with it, take also marsh mallowes; or feet. the root of wild cucumber, afterwards use an ointment of butter, goose-grease or hens, ammoniacum, bdellium, apples, to which ad a little of unflaked loome, or precipitate, or the oyntment proposed before.

Or Take of hogs-grease as much as you please, and put as much oyl of tartar to it, that by it the oyntment may be made sharpe.

If the evil yeeld not to these, apply a particular suffumigation of cinnabar; Hercules Saxonia de lue vener. Cap. 30. writes that he hath observed a certain woman who for eight years together had clefts in her hands, and had used the help of al the Venetian and Padua doctors to no purpose, was in a short time easily cured with the juce of an herb, which some call mugwort, others tansie, being careful- ly dropt with a feather into al the clefts, and forbearing to wash her hands at al, and that he hath found the same juyce profitable in ringworms and Crusty Ulcers.

Buboes.

Concerning buboes which are wont often to break forth in the groines in the Ve- The cure of nereal disease, we must hold fast this in general, that we do our endeavor, to help buboes. the expulsion of that matter, which nature assayes and endeavors to thrust forth to the more ignoble parts; whenas sometimes by this evacuation nature is wont to free her

lier self from al that disease; therefore if a buboe break not forth enough, and increaseth but tendeth not to suppuration, we must use our endeavor to draw it forth and suppurate it. Therefore the thigh of the same side must be rubbed, and scarified about the lower part; or else a vein must be opened about that place; but on the bubo it self there must be layd strong drawing medicines. As,

Take of sagapen, Ammoniacum each three drams; opbionax, Bdellium, each two drams; mustard, pepper, Pellitory of spain of each one dram; blacke soap half one ounce; mix them and with wax and pitch, make an emplaster.

Yet if nature be oppressed with the plenty of virulent matter, that it cannot expel it al, then 'tis good to give a purge, that part of the burthen being taken off, nature may the easier expel the rest.

When the tumor hath broke forth enough, we must take care it be speedily opened, and be kept open a long while; that it may suppurate we must lay on it those maturatives, which are wont to be applied in inflammations, of the mucilage of mallows, marsh-mallows, wheat and flax seed, figs, hogs-grease, goose-grease, and the like; or the simples diachyled, or that compound with gums; when 'tis maturated, we must not expect that the bubo should open of it self, but it must be opened betimes, least the virulent humor detained there do hurt other parts; the tumor being opened the forementioned digestives and abstersives must be layd on, to which there will be need sometimes to ad a little of mercury precipitate, and the ulcer must be kept open a long time.

Yet in cold buboes there is no such feare, that the matter should ascend to other parts, but if purgers and sweaters, and proper alexipharmaca be applied, sometimes the bubo doth wholly vanish without any danger.

Gummosities and Nodes.

Truely Such tumors and nodes, which do rise in places void of flesh, as the forehead, the skul, and the outward part of the legs, do oftentimes vanish, if the disease be perfectly cured; especially after the use of sarsaparilla, which is most effectual in discussing of these diseases; and after the use of mercurial unctions, which are applied to such tumors yet if after the cure is ended such tumors and nodes remain, things emmollient, attenuating, and digesting must be laid upon them, and that are strong, as the root of wild cowcumber, bdellium, sagapen, opoponax, and chiefly ammoniacum, or diachylon with gums, or a mercurial cerote; this is good and proved by experience.

Take Of the plaister diachylum with gums one ounce; simple diachylum half an ounce; mercury killed with spittle one ounce, oyl of guajacum as much as is sufficient make a plaster.

Or, Take of Ammoniacum, Opoponax, Gume of ivy dissolved in aqua vite, ben's and goose grease each one ounce and half; the marrow of a calfs leg one ounce ladanum, styrax, calamine, and liquid each two drams; the powder of hermodactil roots orrice, each three drams; cinnabar one dram; quicksilver mix with turpentine six drams; oyl of lillies and wax as much as is sufficient, make a cerote.

Also the lavatories made of mercury, mentioned before, are good in these tumors.

If these things do not satisfie, the tumors must be opened with causticks, especially if they be not in the joynts, nerves, tendons, and the place must be kept open, and the bone underneath, which for the most part is hurt, must be scraped.

Smal Bunchings and pustles.

Bunchings also and smal pustles, thymi, verruca, favi, as in other parts of the body, so especially they are wont to rise in the head, about the arsehole, yard and privities in the french pox: which though sometimes after a universal cure they vanish of their own accord, yet sometimes also they require a peculiar cure. *Bunchings and pustles.*

This sort of bunchings which are in the head, must be washed often with the decoction of guajacum, and chiefly of the barke of it and sarsaparilla; some use oyl of scorpions and vipers: to which if they yeeld not, they must be anointed with some mercurial unguent, or the compound water of allum, prepared of roch allum and mercury sublimate, which some also prepare thus.

Take *Of roch allum, Mercury sublimate each two drams: grind them, ad of plantane and rose water each one pound: Boyl them in a glass to the consumption of half, afterwards let them stand fifteen dayes that the allum and mercury may sink to the bottom, and let the cleare water be poured off, and kept for your use.*

If the pustles be in the mouth, use washing of the mouth with the decoction of guajacum, or if there be an inflammation, with chalybeate whey, to which may be added roses and plantane; and if the pustles be foule, ad scabious and ten grainies of alum to every pint of the whey or decoction. The compound alum water even now described is most profitable; yet in pustles of the mouth, tis not safe to use that alone, but it must be diluted with a treble or quadruple quantity of rose and plantane water. But the pustles of the arsehole and yard, must every day be often fomented with a linnen cloth wet in the decoction of guajacum and sarsaparilla; for the same the alum water even now described is very good: or if the evil be stubborn, some ointment must be laid upon them, with powder of precipitate, such as were proposed before, or precipitate mixt with foure times as much of the white of an eg; wch layed upon such excrescences of the arsehole, in 24. houres space extracts and roots them out: afterwards drying and cooling things must be layed on. Some cut off the french warts with Scissers, and afterwards take out the root with the medicines even now proposed: also if the extreame part of the wart be toucht with oyl of vitriol, it dries up and falls off.

Falling of the Hair.

The falling of the haire wch is joyned with this disease, doth happen rather from the knowing off, of the roots of the hair, than from other causes, both in the head and beard which that it may be cured, generals being premized first the hair must be shaved off, if the patient wil allow it: for al do not admit of it, especially religious men, whose diseases must be kept private as *Hercules Saxonia* writes *de lue Vener. Cap. 38.* then astringent things must not be used, by the use of which the evil is made worse, and ulcers and paines of the head do follow upon it the matter being retained: but those things rather are to be used, which do discusse and cleanse away that vicious matter which eates of the haire: as a lye in which have bin boyled Guajacum and its bark, sarsaparilla, leaves of fumitory, betony, scabious, southernwood, wormwood, pennyroyal, asarabacca, agrick: and if the skin be dry, mallows, marshmallows, pellitory of the wal must be added: then the other medicines must be applied, which are propounded *lib. 5. pract. par. 3. sect. 2. cap. 3. and 4.* al which if they satisfie not, particular suffumigation for the head and face, must be prepared of quick-silver and cinnabar, by which remedy in the space of six or nine dayes, the falling of the haire is stayed. But for the most part, if universal purgers, and emperiers be applied, and the matter knowing the haire be taken away and proper lotions be used, afterwards haire doth succeed of its owne accord in the place of that that fell away, see more in the place alledged *de Alope. et Capil. desu.*

Falling of the hair.

Paines.

Pains.

The Cure of pains.

Also most grievous pains do often afflict those who are sick of the Venereal Disease; but they are most commodiously taken away by medicines proper to this disease: but Sarsaparilla is chiefly good to take them away; therefore if the pains be very urgent, on the first daies you must take a greater quantity of Sarsaparilla, and a less of Guajacum: and though the matter being dissolved and melted, the pains be encreased til the second week, because Sarfa hath an extraordinary attenuating faculty, without any astringent of the bowels; yet we must not desist from the use of it, but the patient must be told of it: afterwards when the pain is ceased, we may encrease the quantity of Guajacum, and China Root may be added also to mitigate those pains: but by intervals, almost every week, give proper purging medicines; but to the places pained apply fomentations of Guajacum, Leaves of Penroyal, Sage, Rosemary, Chamomel flowers: Oyl of white Lillies also, of Rue, Scorpions, Vipers, Guajacum, are good: if the pain be very urgent, we may give also Laudanum Opiate. Upon the use of al which, if the pain depart not, those mercurial Unguents, which we propounded before in the universal Cure, must be anointed on the places pained; or by the addition of wax make Cerotes of them, and lay them on the parts pained, or some other plaisters above propounded; to which also may be added, Castor, Hermodactil Roots, Orice, and other Arthritical Medicines; especially *Vigo's* Cerote of Frogs is of good use to lay asleep those pains: and this Cerote of *Platerus* is good too.

Take of Quick-silver three ounces; stir it with one ounce of Turpentine washed with Aqua vite; adding Bears grease, the marrow of a Calves Legg, of each an ounce and half: Oyl of white Lillies, Chamomel, Dill, bayes, worms, or Foxes, of each half an ounce: Spike or Turpentine two drams: Euphorbium, Frankincense, of each half an ounce: Liquid Syrax six drams: Hermodactils two drams: Castor one dram: Wax as much as is sufficient. Make a Cerote.

Also the aforesaid Lavatories prepared of Mercury, formerly propounded, applied to the parts pained, especially the Legs, do allay the pains.

*The Running of the Reins.**The Cure of the Running of the Reins.*

The Running of the Reins, which also is frequent in this Disease, is not to be stopped at the beginning, nor rashly: whenas Nature doth endeavor to purge the virulent matter through that plate, which if it be suppressed flies up to the Head, may infect the whol Body: but if it do not stop when the decoction hath been used til the third week, let the Region of the Loyns, and Perinaum, be anointed with astringent Oyls, made of Mastich, Mint, Roses, Mirtle.

But let Medicines be given of the seed of the Chast-tree, Lettice, Hemp, to which add a double quantity of the powder of Sarsaparilla: and those Medicines may be given either in the form of a powder, or with Syrup of Water of Lillies, be reduced into the form of an Electuary. 'Tis good also if every day there be given two or three drams of Water-lillies, with one or two scruples of Turpentine: Some also do give for this Running of the Reins, green Mercury precipitate, or the Rozin of Guajacum and Turpentine, which is washed with Violet Water, and adding the Yolk of an Egg, and the Decoction of Sarsaparilla, 'tis reduced into the form of a Potion.

*A Consumption.**A Consumption.*

At last it often happens, that either by the violence of the Disease, or the Cure not rightly ordered, the sick come into a deep Consumption: For the Cure of which, the common Medicines for a Consumption will not suffice, but there is need of

of Specificks. Which kind of Remedy *Audovicus Septalius animadvers. Lib, 7. n. 214.* doth propound, and writes that by it, he hath wholly freed very many from this disease, and from such a Consumption. But 'tis prepared thus.

Take of choice Sarsaparilla cut smal, six ounces; infuse it twenty four hours in fifteen pound of warm water, in a warm place, in a vessel shut: afterwards boyl it with a gentle fire till five pound be wasted: then with a spoon perforated take out the Sarsaparilla, and bruise it in a marble mortar: then cast it into the same water again, adding two pound of lean Veal, Coriander seed prepared one ounce, or instead of it, so much of the shavings of Guajacum, or three drams of yellow Sanders sliced, according to the condition of the Patients body and humors: and the vessel being covered, let it boyl again with a gentle fire, till there remain five pound; and towards the end aromatize it with three drams of choice Cinnamon: then strain it, squeezing it hard, and keep it for your use in a glass or glazed vessel.

Of which let the patient take in a morning four hours before meat, six or seven ounces; but in the evening three hours before supper, four or five ounces: And if it be Summer, or a Hectick Feaver is joyned with it, he adds of Barley excoriated or husked, four ounces: and he continues the use of this Medicine many dayes, sometimes to the hundreth day.

Let the rest be sought for out of the Cure of the particular Diseases, and out of *Fallopius de morb. Gal.* who hath writ at large concerning the Diseases and Symptoms which are joyned with this Disease.



F I N I S.



Mris. Culpepers Information, Vindication, and Testimony, concerning her Husbands Books to be Published after his Death.

SO great are the Afflictions
wherewith our Heavenly
Father hath been pleased to
exercise me his poor Hand-
maid, that I have not only
lived to see my dear Hus-
band, (the Stay and Solace
of my Life) taken from me:
but it hath been my hard hap
also to see his Reputation, and Memory (which wil
be dear to al Posterity, for the Works he hath written
for the Common Good of this Nation) blemished, and
Eclipsed, by the covetous and unjust Forgeries of
one, who, though he calls himself Nathaniel, is far
from being an Israelite in whom there is no guile;
who was not content to publish a Hodgpodg of un-
digested Collections, and Observations of my dear
Husband deceased, under the Title of Culpeper's last
Legacy; but to make the Deceit more taking, he
stealed his Forehead so far, and brased it so hard,
as not to be ashamed to forge two Epistles, one in
mine, and the other in my Husbands Name; of the
penning of which, he nor I, never so much as drea-
med: And yet he impudently affirmeth in my Name,
that my Husband Laid a severe Injunction on me to
publish them for the general good, after his decease;
and that they are his last Experiences in Physick and
Chyrurgery. And in the Title of his Book, he said,
They are the choycest, and most profitable secrets,
resolved never to be published til after his Death. At
which Expressions in the Title and Epistles, are as
fals as the Father of Lyes; and every word in them,
forged and feigned. And he knew wel enough, that
no discreet, honest man, that was a friend to my
Husband, or me, would ever have agreed to such
infamous and dishonest practices; and therefore I
desire all Courteous Readers of the writings of my
Husband, to take notice of this Deceit, and to assure
themselves that it never entred into his head, to
publish such an undigested Gallimostery, under the
promising and solemn Name of his Last Legacy, and
that whereby he gained his Reputation in the
World, as the Imposter makes him speak in his
forged Epistle. And I desire any in different Reader,
that hath observed my Husbands losly, and Mascu-
line manner of expressing himself in his Prefaces, and
Epistles Dedicatory, whether in case he had been
minded or disposed to take so solemn a farewell of
the world, as the Forger makes him to do; whether,

I say, he would have done it in such a whining
fashion, and so in the Stile of a Balade-maker, as to
say, And now, if it please Heaven to put a period
to my Life, and Studies, that I must bid al things
under the Sun farewell: Farewel to my dear Wife
and Child, farewell Arts and Sciences, farewell al
worldly Glories, adiew Readers. Certainly my Hus-
band would have been far more serious, and materi-
al, in such a case, as any discreet man wil judg.
Neither can it be thought, that in such a solemn
Valediction, he could possibly forget his wonted re-
spects to the Colledg of Doctors, to whom he did so
frequently address himself, in divers of his writings.

Courteous Reader, I shal say no more touching the
abuse of the Book-seller, only to prevent (as much
as concerns me) thy being abused for the future;
know, That my Husband left seventy-nine Books of
his own making, or Translating, in my hand, and I
have deposited them into the hands of his, and my
much honored Friend, Mr. Peter Cole, Book-seller,
at the Printing-Press, neer the Royal Exchange
(for the good of my Child) from whom thou mayest
expect to receive in print, such of them as shal be
thought fit to serve thee in due season, without any
Disguises or Forgeries, unto which I do hereby give
my attestation. Also my Husband left seventeen Books
completely perfected, in the hands of the said Mr.
Cole, for which he paid my Husband in his life-time.
And Mr. Cole is ready and willing (on any good oc-
casion) to shew any of the said seventy-nine Books,
or the seventeen, to such as doubt thereof.

And if any Person shal question the Truth of any
part of this Vindication, or Epistle; if they wil
take pains to come to me, I wil face to face, justify the
truth of every word thereof, as I have subscribed my
Hand thereunto in the presence of many witnesses.

I profess in the presence of the great God, the scar-
cher of al hearts, before whom Mr. Brooks and I
must one day give an account of al our Actions:
That I have not published this Epistle or Vindicati-
on, out of any dis-respect to Mr. Brooks (for I much
respect the man, and would be glad to serve him to
my power) but only to cleer my Husband from the
folly and weakness cast upon him by the means above
expressed. And out of tenderness to Mr. Brooks,
I first tried other means of keeping, and afterwards
of repairing my Husbands Credit, and then stayed
long to see if he would repair (in any measure) the
wrong done to my Husband, and myself. I desire to be.

From my House, next door to the
Red Lyon in Spittle-fields,
October, 18. 1655.

Your Servant (in,
and for the Truth)

Alice Culpeper.

Mris. Culpeper did the 18. of October, subscribe this Epistle in Vindication of her Hus-
band's Reputation, before Ten Witnesses, as she had done another Epistle on the
ninth of October, almost in the same words with this, except neer the Conclusion.

A

TREATISE

OF THE

GOUT.

Chap. I. Of the Nature of the Gout.

He Gout is by the Greeks called *Arthritis*, from *Arthron* signi-^{Its Name.}
 fying a Joynt; but by the Latines it is termed, *Morbus* or *Do-*
lor Articularis; and by us in English it hath its Name from the
 place affected, and in general is called the Gout. The more
 Barbarous among the Latin Physicians call it *Gutta*, because that
 this Malady is excited by a flux, made as it were drop by drop.
 And there are likewise of the more Modern writers, who
 follow these; yea they prefer this Appellation before all other
 whatsoever; but yet not so rightly, as anon, in the first Que-
 stion, we shall shew you.

But now, albeit that *Arthron* (as by the Author of the *Medicinal Definitions* and *Arthron*
Introduction it is defined,) be the *Compages* and Composition of the Bones; ordai-^{what it is.}
 ned for the motion of the severall parts; yet here notwithstanding in this place, by
 the word *Articulus*, or joynts, we are not to understand the very *Compages* of the
 bones; and the *Synthesis* or Union of them; or the Extremities of the Bones that are
 conjoynd; or the space betwixt the Bones, which are Joynd together by the joynt;
 but the parts that Joyn the very Joynt together, and encompass it; especially such
 of the parts as are endued with sense, to wit, the Membrans, Membranous Ligaments,
 the extremities of the Muscles, and the Nerves that are inserted in these parts.

But in regard that the Joynts are various, from the difference of these, and from ^{The differ-}
 the variety of the parts affected, the Gout (which the Greeks call *Arthritis*) hath ^{ences of the}
 also received divers and different Names; and if the Feet be affected, it is called ^{the gout,}
Podagra; if the Hands, *Chiragra*; if the Hip, *Ischias*; if the Knee, *Gonagra*; and ^{according}
 many other of these words, derived from the place affected, and the Greek word ^{to the va-}
Agra which signifieth a taking or seizing upon; so that *Podagra* is nothing else but ^{riety of the}
 the taking of the Feet; and *Chiragra* the taking of the Hands; in regard that these
 members are in this Disease as it were taken, and by it ensnared, and held fast:
 even as by *Lucian* (in his *Tragopodagra*) the Gout is brought in thus speaking:

By the most of Men I am called *Podagra*, being the taking, and detaining of the Feet.
 But in the other Joynts it hath no special name, but by a common and general name
 it is called *Arthritis*, that is, the Gout; like as also in general, it is then called
Arthritis, when at one and the same time a pain seizeth upon many of the Joynts
 together. But the truth is, that some certain men there have been who have feig-
 ned & made very many such like words as these; and among the rest, *Ambrose Parry*,
 (in his first Chapter of the Gout :) and if the Malady be in the Joynt of the Jaw-
 they call it *Siagonagra*; if in the Neck, *Trachelagra*; if in the *Spina Dorsi* or
 Back-bone, *Rachisagra*; if in the shoulder, *Omagra*; and if in the Joynt of the
 Elbow,

Elbow, they term it *Pechyagra*. But we meet with no such Names as these in any of the Greek Authors; neither indeed are they commonly used; although that these Grecians themselves tel us very often that the *Arthritis* may be generated in many parts of the Body.

And in *Pliny* also (in his 27. B. Chap. 1.) we meet with the word *Mentagra*, at first invented (as he saith) in sport, and merriment, (for it is a vicious medley Composition of a word, from a Latin and a Greek word, and such as the learned are never wont to make use of) but soon after notwithstanding it became common: but the truth is, that Affect belongs not to the *Arthritis* or Gout; but it was a certain foulness and nastiness of the face, and a kind of Scabbiness, pertaining, and to be referred unto the *Lichenes*.

The Latines have likewise retained the Greek words, since that even from them they received the Disease also. Touching which *Pliny* in his B. 26. Chapter, 10. The *Podagra* (saith he) *Was wont to be a Disease more Rare, and not only a stranger unto the memories of our Fathers and Grand-Fathers, but even unto our own also. For had it been anciently known in Italy, it had ere this time received a Latin Name.*

And yet notwithstanding it is here to be observed, that although the word *Podagra* be properly taken for the pain of the Feet; Yet sometimes also (as even *Crato* in his 253 *Consil.* confesseth) by an appellation borrowed from one Member, the word *Podagra* is to be taken and understood for every kinde of Gout in what part soever; in regard that so it is wont to happen, that the Feet for the most part, in the first place, and more frequently are taken, and affected with this Disease; and they also are very seldom free, when the other Joynts are affected. And hence it is also, that *Lucian* inscribeth that *Dialogue* of his, which is touching the *Arthritis* or Gout in general, by the name of *Tragopodagra*. And so they that have written in praise of the Gout *Podagra* (as *Cardanus*, and others) they all of them seem to treat of *Arthritis* or the Gout in general. Yea and certain Physicians there are that treat properly of *Arthritis* or the Gout in General, and yet they inscribe these their Tracts, *de Podagra*, or of the Gout (in special) of the Feet.

what place the Gout most frequently invadeth. To wit, most frequently this pain invadeth the Feet; and indeed most of al, and in the first place, the great Toe of the Foot. For Nature (as much as she is able) is wont to drive forth the vitious Humors unto the extreame and remote parts; and the Feet are likewise more remote from the Fountain of heat; and they are also more in motion, by which the Humors are drawn unto them. And from hence it is that *Galen* (in the sixth *Seet.* of the *Aphorisms*, *Aphorism.* 28.) writeth, that al those that are troubled with the Gout, that is to say, with the pains of all the Joynts, they are first of all taken with the Gout *Podagra*, or the Gout in the Joynts of the Feet. This indeed for the most part so happeneth, but yet not alwaies. For in some the Gout begins in their Hands; and some have it first in their Knee, and in some it beginneth in some other of the Joynts. And albeit that it first of al seizes upon the Feet, yet notwithstanding it afterwards also for the most part invadeth the Joynts of the Fingers, or those places that are about the Hand Wrist, as also the Joynts of the Arm and Elbow, and sometimes likewise the Neck, and the Joynts of the Jaw-bone. And indeed this Evil in the first beginning of it (for the most part) seizeth upon but one of the Joynts, either in the Foot, (which most usually happeneth) or else where; but then afterwards, (the bowels being debilitated by the thick and often returns of the Disease, and the Native heat being much impaired, and the matter dayly more and more heaped up) it then invadeth more of the Joynts; so that it often cometh to that pass, that there is scarcely any Joynt or juncture of the bones throughout the whole Body that may be said to be free from this Malady; and as *Lucian* (in his *Tragopodagra*) writeth, *This Evil tortureth and tormenteth the afflicted and Miserable Body, from the very Fingers ends, even unto the extreame parts of the Feet, and the ends of the Toes.*

Yea, and oftentimes it comes to that, that the vitious Humor is not only poured out into all the Joynts, but likewise into ocher sensible parts; as it hath been often observed, that in some this Humor hath been so poured forth into the Teeth, that it hath there caused a pain; and in others (in whom it hath been poured forth unto the breast) it hath there excited a spurious and bastard Pleurisie.

But

But now this Malady is not wont to continue long at a time, but to afflict the party by certain intervals and Periods, whiles the matter heaped up is thrust forth unto the Joynts by certain intervals; which indeed in the beginning are somewhat longer; so that the Diseased persons are often free for six months, and sometimes likewise they are free from this Gout for a whole year together; but then afterwads the Bowels and the Native heat being much weakned and impayred, and many vicious Humors being heaped up together, the Malady returneth by shorter intervals, sometimes after three months, and sometimes every month; Yea and some there are, whom it doth continually afflict and make them to keep their beds.

Now *Arthritis*, or the Gout, is in the general defined to be, *A pain of the parts about the Joynts, excited from the defluxion of a serous and sharp Humor, and poured forth into them out of the Veins and Arteries.* Or, if it please you rather to define it in any other manner, when a swelling doth now concur with it, you may then say that it is a Tumor or Swelling about the Joynts, arising from a defluxion of the serous or wheyish, and sharp Humor by the Veins and Arteries unto the place affected; and by reason of the extension of the Membranes about the Joynts, and the Acrimony of the Humors Twinging and pulling them it hath Joyned with it a pain, and hinderance of motion.

And because that the Nature of this Disease is such, that when it hath once begun to infest and trouble a person, the Body can hardly ever be so carefully looked unto, and well ordered, but that upon every sleight cause and upon the least occasion given it will again return, and indeed by certain Periods, (sometimes once a year, sometimes every six Months, and now and then once every Month :) many therefore of the most learned Physitians do likewise add this in the definition, that it is a pain or swelling returning by certain intervals and Periods. But if there be any one that thinketh it therefore to be omitted, because that he who is at the first troubled with the Gout, and so hath not suffered many Paroxysms returning by intervals, yet may be truly said to be affected with the Gout: yet Notwithstanding, he cannot deny this, that the very Nature of the Disease is such that even in the very first Paroxysm the Disease is in it self naturally fit to return by intervals; like as he who is at first taken with a Tertian or Quartane Feaver, is truly said to be troubled with a Tertian or a Quartan, albeit that he hath not yet undergone many Paroxysms or fits returning every Third or Fourth day.

Franciscus India indeed blameth those that define the Gout by a pain, in regard that neglecting the Disease they define this Malady by its Symptoms. But it is no new thing, to define some certain Affects (in the which the Symptom and the Disease concur) by the Symptoms, as more urgent, more troublesome and grievous unto the Diseased party, and more manifest in themselves. And so the Phrensy is defined by a Deliry, and the Pleurisie by a pain; although that there be in both places present a Disease, to wit, an inflammation. And therefore there are many of the ablest Physitians, both Ancient and Modern, who inscribe their Tracts touching this Affect, of the pain of the Joynts. Neither again may the Gout be here alwaies so fitly defined by a Tumor or swelling, in regard that oftentimes there is no swelling evidently appearing in the External parts; and yet nevertheless the pain is then greater and more vehement then when there is a swelling in the part. But *India* himself is very much mistaken and greatly erreth, whiles he defineth this Malady by a deflux.

And moreover, although that every Gout that happeneth about the Joynts may be called a pain (and in this manner this name may be also attributed unto pains that happen in disjoyntings, Contusions, or bruises and blows, wounds, that which is in the French Pox, that which happeneth unto Virgins while their Courses are flowing from them, or such as happen unto the Hips of great Bellyed Women that are neer the time of their Travail, or in general, unto all pains whatsoever that happen about the Joynts :) yet notwithstanding, we do not here take the word Gout in so large a sence, but in a more eminent and especial manner we here, by this Name understand that peculiar kinde of pain which the Germans call *Das Zipperlein*, arising from a sudden influx of a Humor into the Joynts, insinuating it self into the more hidden and inward parts of the Joynts, and returning by intervals and Periods.

The

The subject of the Gout. The subject of the Gout (if it be defined by pain) are only the Membranous parts, and those parts about the Joynts that are endued with a quick sense and feeling. For a Membrane being the Adequate subject of the Touch, even here also those parts that are grieved with pain do suffer it as they are membranous; from which nevertheless we may not exclude the Membranous Ligaments. For although that *Galen* teach us that all the Ligaments want sense, yet notwithstanding we are not to deny sense unto the Membranous Ligaments, which (as we finde by experience) are very sensible of pricking, and the Gout it self doth evidence it. Neither is that Reason they commonly alleadg to the Contrary of any great weight and moment, to wit, that a Man should be alwaies Obnoxious unto pains, and never free from excruciating Tortures, if the Ligaments that are sensible of pain should dash and strike against the bones: for Nature hath so fenced and guarded those parts, and so admirably ordered it, that no such thing can happen. And hence it is that we daily lay hold on with our hands, and walk upon our Feet, in which there are very many Tendons, Nerves, and Membranes, and yet nevertheless we are not sensible of any pain. But if it be defined by a Tumor or swelling, then all the parts that joyn together the Joynt, and lie round about it, may be said to be the subject of the Gout. But now that these pains are excited more about the Joynts, then elsewhere, the Cause is this, to wit, that the Veins and Arteries pour forth in these places (in the which there is a Concourse of the Membranes and Nerves) those Sharp Humors which Nature endeavoreth to expel, and which cannot flow forth in the middle Channel of the said Veins and Arteries; and because that the Humors arriving at the seat of the Joynts stick fast in these more streight and narrow places, where all the parts that end there are joyned together, and infolded the one within the other; whereas elsewhere they might more freely be moved up and down, and have room enough to disperse themselves hither and thither.

And indeed, the truth is, that now and then that Humor is also diffused into other parts; and there is a certain Nameless Author, who (in the eighth Section of his *Book of the Gout*, added unto the writings of the principal Physicians) telleth us, that these kind of fluxions do not only infect the Hands, Feet, and all the joynts; but that it likewise maketh an impression upon the very Head, upon the very Liver, yea and sometimes upon the very Heart it self. And *Hieronymus Capivaccius* also (in his *Consil.* collected from *Scholtzius*, *Consil.* 226.) maketh mention of the Gout pain in the side; by reason of which the sick person was constrained to lie upon his Back, neither was he able to move his sides. And a person of Honor once told me (as I remember) that a certain man afflicted with the Gout, felt likewise very sore and grievous pains in his very Yard: and it was related unto me by an Honorable Lady, that a Kinswoman of hers being troubled with the Gout, a certain Marl (for so she called it, and indeed not unfirly) brake forth also in her Fore-Head, so that it might have been even swept off like sand, and grains of Salt. But the truth is, the Cause breeding the Gout, if it be in great abundance, it may likewise be diffused into other parts besides the joynts, but yet notwithstanding it doth not breed the Gout any where else but in the joynts.

Why those who are troubled with the Gout do seldom suffer any convulsion? But now it may here in this place (and that not without good cause) be demanded how it comes to pass that those persons that are afflicted with the Gout do yet so seldom suffer any Convulsion (but only a pain) whenas yet the Nervous parts are here affected, and indeed so twinged and pulled by the sharp Humor that there may seem to be great cause for the exciting of a Convulsion? *Thomas Erastus*, in his 4. *Disputat.* against *Paracelsus*, thinks this to be the Cause, that the Humor that is poured forth about the Nerves is waterish and Flegmatick, and therefore doth more loosen then extend them: and if this be not the Cause, he confesseth ingeniously that he is altogether ignorant of it, and knoweth not what it is. But yet we do not acknowledge this for the only true Cause; neither is it indeed a truth that the Humor exciting the Gout is simply waterish and Flegmatick, that rather loosenerh then extendeth the parts as we shall hereafter prove, and as it appeareth even by the pain it self, which is most sharp and intollerable. And therefore I conceive the cause hereof to be in the place affected, to wit, that not the very Nerves themselves (as they are inserted into the parts destined unto motion, viz. The Muscles that serve thereunto) are affected, but rather the Membranes, and the Membranous Ligaments, which parts are not ordained for motion, neither serve they thereunto; and

and therefore although they suffer most grievous pains, yet nevertheless they excite no Convulsive motion, unless haply the Brain be drawn into consent; like as we may plainly see the truth of this in the pains of the Teeth, the Eyes, the Pleura Membrane, the Colon Intestine, and the like pains; in all which it is not the Nerves (appointed for motion) but rather the Membranes that are affected, without any kind of Convulsion. And the very same happeneth in the Gout, in which the membranous parts that are about the Joynts, and knit together the extremities of the Joynts, are either distended, or twinged and pulled by the Humors flowing thereunto.

There are some indeed who assert, that the very Cavity or hollow space that is between the extremities of the Bones do receive the Humors that flow thereunto, and that this space is the true subject of the Cause breeding the Gout. But this is false, as anon we shall shew you in the *Third Question*.

The *Proxime* or next Cause of the Gout pain (as in other parts likewise) is the solution of Continuity, which is produced by the afflux of the sharp Humors into the Membranous parts about the Joynts either by distending them, or else by their acrimony at once both pricking and pulling them.

Now those things that accompany this pain, are First, an impotency and weakness of the motion; and by the motion of the joynt the pain is irritated and augmented. And then also a swelling (and this for the most part with a redness and heat) Symptoms of the gout followeth upon it, and is discerned more especially in the extream joynts; and yet nevertheless, there appeareth now and then only a moist and waterish swelling without any redness at all. In the Hip and Shoulder blade (being fleshy places) there scarcely appeareth any swelling at all externally, but the Humor that hath flown thereunto lieth hid and covered by the flesh. And there is also a Feaver (a continued one) that almost alwaies with a pain invadeth in the *Arthritis*, or Gout in general, and oftentimes also in the Gout of the Feet and Knees; and the sick person is first of all taken with an extream Chilness, and then presently a heat followeth upon it; and this is the Cause that the sick persons are so vexed and troubled with thirst, and that the pulse is changed, and that the Urines become very red, which oftentimes at the first beginning are waterish. But now, what kinde of Feaver this is that accompanieth the Gout, in this many Authors differ, as below, in the *fourth Question*, we shall shew you. And sometimes there are likewise other Symptoms that follow upon the said pain; and among the rest, watchings, restlessness, and a Spasm.

If the Gout continue long, and often afflict the sick party, then at the length there are generated in the joynts hard knots and knobs, from the more thick part of the ferous or wheyish Humor, that even of its own accord tendeth to a Coagulation or Clotting together; and if the Skin be opened, out there runneth a matter, sometimes fluid and white, and sometimes like unto Playster or white Lime; and sometimes the matter is hard, like unto gravelly stones that may be crumbled.

This Malady is likewise known to disperse it self among the common People, the Cause being Generated from the general and common fault and vice either of the Air, or of the ordinary diet in many places. But now, whether it may at any time happen by Reason of any defect of that kind of fruit we call Mulberries, we shall further discuss this point anon, in the *fist Question*.

Chap. 2. Of the Causes of the Gout.

THe *Proxime* or next Cause of this pain in the Gout, is the Solution of Unity in the Membranous parts about the joynts: Now this solution proceedeth not (as *The cause of the gout. Solution of unity in the Gout from whence it happeneth* *Capivaccius* wil have it) only from a Compression of the sensible parts about the joynt, caused by a preternatural repletion of the Ligaments with a Humor flowing thereto. For why, the Ligaments are most solid, and most thick, in so much that (in the first place) they themselves cannot admit of the Humors; and the pain is oftentimes in the highest degree, (when there is scarcely any swelling appearing,) and indeed far greater then that it should possibly be caused by compression only. This pain is therefore rather caused by the distention, and twinging, or pricking, in the sensible and tender parts about the Joynt.

But now, what the Cause of this distention, Pulling, and Pricking, is, cannot easily be explained, by reason of the difference in Opinions (among Physicians,) touching the same. For some there are that teach us how that the Gout is generated only from a distemper; others from a Winde; a third sort, only from a Humor; and some of these will have this Humor to be flegm, others Choler, others Flegm with Choler; others assert it to be Flegm mingled with blood; others, Crude and Watery blood; others say that it is a whey; and others there are that admit of all these Humors. And indeed some affirm that this Humor floweth down from the Head, others again from the internal parts; others from the external parts between the Skul and the Skin; some again will have it to flow forth of the Veins, and others by both these waies; touching which we intend to discourse more at large, below, in the *seventh Question*.

The nearest
causes
of the gout

But in brief, that we may here in a word state the Controversie, the immediate and nearest Cause of the Gout is a Humor, partly distending the parts of a quick sense about the joynt, and partly pricking and lancing them, to wit, the serous or wheyish Humor, and yet such as is not waterish, but Salt and sharp, and (as the Chymists call it) Tartarous; bred in the sanguification, in the Liver, and in the Spleen, and by Nature thrust forth by the Veins and Arteries into the parts about the joynt. And indeed this Humor is altogether of a peculiar Nature, and much different from those other Humors that breed an inflammation in other parts; and it hath its original from the same kind of Aliment that Plants draw from the Earth. For in all sorts of Earth there is something that is saltish, and partaking of a Mineral Nature. Which whether we call it the Salt of the Earth, or else Tartar (with the common sort of Chymists) it matters not with me, so that we agree in the thing it self.

whether
the Salt of
the Earth
and Tartar
differ.

And yet notwithstanding it seems not al one to me, whether we call it the Salt of the Earth, or else Tartar. For Salt is indeed a simple Body of its own kind; but Tartar (as it is in truth taken here generally in this place by the Chymists) is a compound of Salt, and Earth, yea and of Sulphur likewise. From whence also it is that there are constituted Differences of such like Earths; and so there ariseth a diversity of the Humor breeding the Gout in divers Bodies and places. And from either the abundance or scarcity of this Salt, and the mixture of it with other Juices there arise various differences of Earths; so that some of them are dirty, others muddy, a third sort Clayish, a fourth sandy and Crumbling, a fifth Limye; and in some Earths there is an abundance of that we call Marle, in others Chalk, and in others there is something else that aboundeth: and in some Earths (in the which likewise Bread Corn grows very plentifully) there is so great a store of this Salt, that even out of them there may be distilled a certain spirit that dissolveth Metals. That Salt or Tartar is attracted from Plants (together with their Aliment) out of the Earth; and hence it is derived into men unto whom those Plants serve for Meat and Drink: and unless it be severed and separated in a Convenient manner, it is at length mingled together with the blood, and being altogether unfit for the nourishing of the Body it is in the end driven down and thrust into the joynts, for those Causes that we shal anon declare unto you. And this Salt Humor that causeth the Gout oftentimes cometh very neer unto the Nature of spirits (as the Chymists call them) such as are those of Wine, and other Vegetables, endued with a volatile Salt; as also of Salt, Vitriol, Nitre, and *Aqua Fortis*; which although that they are thin, Subtile, and Resemble the Nature of Water, yet notwithstanding they contain in them a most sharp and biting Salt. And this Salt is contained as well in the Arteries, as in the Veins; from whence likewise it is, that being most subtile it excith very extream, intollerable, and most acute pains. For it is not requisite, that those Humors should alwaies hurt the Body in a thick and gross manner; but oftentimes they are made spiritual, as we shal afterwards also (in the Causes) shew you, touching Wine. And many things there are that teach us the truth of this. First of all the very vehemency and fierceness of the pain it self, which cannot possibly proceed from a Flegmatick or watry Humor, or else from Blood distending the parts; but from a very sharp Humor, being oftentimes indeed but little in its quantity and bulk, but yet in power very great, and most efficacious. And moreover it appeareth from this, that at length there are generated in the Joynts certain hard knobs and knots; out of which there is taken, and goeth forth

forth a matter like unto Lime, such as also some certain Wines before they be wrackt and taken off their Lees do yield forth; which happeneth not at all in other Tumors, which are rather turned into Pus, then any such matter as this; and therefore it sufficiently sheweth that the Gout hath some other peculiar cause, that the rest of the Tumors or swellings have not. And Thirdly, the Causes do argue and prove the same; since that there is nothing that maketh more for the generation of the Gout then Wine, which most of all aboundeth with such a Salt and Tartar as we mentioned before; there being no plant (as we shall also further shew you below) that doth more attract that that is Salt, Clayie, and Limy, in the Earth, then the Vine it self; although indeed other Plants likewise, (as Wheat and Barley) do draw unto them the very same matter as the Vine doth, but in nothing near so great an abundance. Yea, and this matter is sometimes likewise contained in the Water; and from hence it is, that now and then such as are Abstemious, or that otherwise by reason of their poverty they drink no Wine, but Water, are yet troubled with the Gout; and in some places we find that even Beer is exceeding hurtful unto those that are subject unto the Gout, whether this happen by Reason of the Corn there growing (of which they make their Beer) or from the Water they use for the same purpose.

And from hence it cometh to pass, that the Gout in very many places is a Disease almost Epidemical. And in those very places where the Gout is in a manner Epidemical (as it is in many places of *Moravia*) the inhabitants there, besides the Gout, are troubled likewise with the Stone, Colick, and that which ariseth from thence, the Pallie and contraction of the Members, and likewise the Falling-sickness; which affects (all or most of them) proceed not from the Watery Humor, but also from that which is sharp and Salt. And last of all, even this teacheth us that this Humor is ferous or wheyish, that the Gout can by no means be drawn to a suppuration. For the blood is easily turned into Pus, and so are likewise the other Humors; but as for the ferous and Salt Humors, this is the Nature of them, that if they be altogether thin, they are then wholly resolved; or if they have any thing that is Tartarous and thick mingled with them, they are then converted into hard knots, and smal Stones that are brittle and crumbling.

This matter, in regard that it cometh neerer unto the Nature of Minerals then of vegetables, it cannot therefore by any means afford a good and fit Aliment unto the Body; and so it ought either immediatly in the First, or else in the Second Concoction to be expelled; which when it happeneth, the Gout is not then generated. And from hence it is, that many Wine-bibbers, and Gluttons, are free from the Gout; which therefore happeneth, because that they have those their Bowels that are destined for Concoction very strong and vigorous; so that they do exactly separate all whatsoever is Excrementitious in those Meats and Drinks that they take in, and evacuate them by convenient waies. But if this matter be not forthwith evacuated, but be retained stil in the Body, it is then thrust forward hither and thither in the Body, until it be at the length driven unto the Joynts.

And therefore without cause or ground it is (as anon in the 5. *Question* we shall more at large shew you) that by some Choler, Flegm, Melancholly, and Blood, are here accused. For possibly it may be that in one Body this Humor may abound and in another that Humor may be in great abundance, and may together flow unto the pained Joynt: yet nevertheless, that wheyish Humor (which Nature desireth to expel forth and therefore thrusts it forward unto the Joynts) is the first Cause of the motion; and then afterwards the pain likewise stirs up and causeth other humors to flow unto the place affected: and therefore if the Body be Plethorick, the blood; but if Cacochymical, then other Humors also are moved unto the place affected. Mean while, those very Humors are not the prime cause of the Gout; and if they had been altogether without that salt and ferous Humor, it had never flown unto the joynts, since that there are many that are Plethorick and Cacochymick, who yet notwithstanding are not troubled with the Gout. And therefore what *Mercatus* writeth, is a truth, to wit, that although juyces or Humors may much abound in the Body, and become very vicious, they do not for this presently degenerate into the Articular affects, and produce the Gout: but that Humor which ought to produce the Gout (as we have already said) is

whether
Choller,
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Melancholly, &c. be
the cause
of the gout

ferous, Salt, Sharp, and Tartarous; and hath a peculiar tendency unto the joynts.

What required unto every fluxion. And now, whereas unto every fluxion there is required the matter flowing, the Term from which, and the place whitherto it tendeth, and the way by which; and that we have now already spoken unto the matter, the cause of the Gout; it remaineth that we proceed to speak of the Term from whence, (or the place in which the matter is generated) the way by which it floweth, and the term unto which it tendeth, or the part receiving.

The part receiving the fluxion in the gout. And that we may first of all Treat of the part receiving, (that so we may afterwards Joyntly explain the Causes both internal and external: in the first place, the parts recipient are here the Joynts, (and those of the Feet especially, from which the Gout *Podagra* hath its original) as weaker then all the rest of the parts, in regard that they are endued with a weaker heat, consisting (as they do) of bones, ligaments, Cartilages, Tendons, Nerves and Membrans; and are further distant from the Fountain of heat; and are likewise greatly exposed unto the injuries of External Causes; and are also much weakned by labor and frequent exercises, and hereupon are rendered most apt and ready to receive the Humors that flow thereunto. And yet notwithstanding the alone imbecillity of the joynts is not sufficient for the generating of the Gout, but there is likewise altogether necessary the fluxion it self.

The weakness of the joynts how it concurr-eth unto the Gout. For (as *Galen* hath it in his *Sixth B. of the preservation of Health Chap. 13.*) they who Collect and Treasure up nothing within them that is superfluous, in them these weak and infirm parts remain still in safety. Of which this is one most evident Argument, that some have for many Months together been very weak and infirm in divers parts of their Body, without any such pain as the Gout bringeth along with it; whereas if weakness alone would cause it, the infirm part should perpetually be troubled, there being no Cessation at all of the Cause of its weakness and infirmity. And now therefore, because that it is not perpetually afflicted, (the Cause of its imbecillity being still continued) we may conclude, as a thing most manifest, that there is something else intervening, which is the Cause of the breeding of this affect; and this most certainly is nothing else, but that that is redundant either in quality or quantity. And yet notwithstanding, that the imbecillity of the parts is the necessary cause of the generating of the Gout, (as the most of the ablest Physicians do assert and determine) is denied by *Carolus Piso* (in his *B. touching Diseases from the affluence of the serous Humor, Consil. 1. of the Gout*) whilst he writeth, that Physicians oftentimes trouble themselves to no purpose, when they admonish us, that there is a very special regard to be had unto the weakness of the recipient parts, seeing that the Joynts do more easily and readily of their own accord receive and admit the hot Wheyish Humor, then the rest of the Members; this doth not (saith he) proceed from their imbecillity, or from any distemper, that is, looseness, or rarity, but from the very Conformation it self, and this not placed in the Cavity, but rather in the Conjunction with the ends of all the Vessels; which Conformation to alter and change is not at all within our power. And he hath there asserted, that the Joynts for this Reason only admit of and drink in the hot Wheyish Humor, because that in them are terminated the external branches of the internal Vessels. To wit, that the Ebullition or boyling out of this serous Humor doth first of all begin in the greater and the internal Vessels, and that from hence it falleth forth into the lesser, and at length into the extream branches, which having no other place whither they may pour back the Humor they have received in, it is thereupon stopt and heaped up together in the joynts, in which the external Vessels (almost all of them) are terminated. All which although it may seem very agreeable unto the truth, yet notwithstanding two things there are that must here be taken notice of. The former is this, that although it be true, that those greater Trunks of the hollow Vein, and the Arteries, (their branches being dispersed hither and thither) are for the greatest part of them terminated in the joynts: yet Nevertheless there are likewise many of those branches which here and there are Terminated in the Flesh, and other parts, and yet for all that they Transfuse not the matter of the Gout into those parts. And moreover also the matter of the Gout is not alwaies poured forth even

even unto the extreame Joynts, but that it oftentimes also stops and staies in the mid-way, in the Hip, Knees, and Elbows. The other thing to be taken notice of, is this, that albeit that Conformation of the Vessels (by reason of which they are terminated into the Joynts) cannot be changed; yet notwithstanding the Laxity and weaknes of the parts into which they are ingrafted may in some measure be changed by those medicaments that corroborate, although it be the least part of the Cure (as hath been said) that is to be expected from these.

But besides the imbecillity of the Joynts, there is yet something else that seemeth to me to be the Cause why this humor is moved unto the Joynts rather than to any other parts; which conceit of mine I submit (as a Paradox only) and leave it unto the free judgment of the Judicious and Candid Reader; and it is this. It is most certain, that the Blood in our Bodies is not altogether homogeneous, but obtaineth divers parts, and that divers parts of the Body are nourished by those different parts of the Blood; as the Flesh by the more temperate, the Bones by the thicker, the Lungs by the more subtile, and so likewise the rest of the parts attract unto themselves from the blood a fit and convenient Nutriment. And this seemeth also to be proved by the stone called *Osteocola* (so called because that it hath in it a notable virtue of Conglutinating the broken Bones) which being taken inwardly penetrateth into the Bones, rather than into any other parts, and causeth that the *Calli* are generated in a very short time; yea, in those that are young it produceth an overgreat *Callus*; as we may see in *Guilhelm. Fabricius* his first Century, *Observat.* 90. & 91. Neither are these things done in a sound Body only; but even the vitious humors likewise have not an inclination of them, neither are they all driven unto any one part; but some of them tend unto one part, and others of them unto other parts; and this we are taught, as by other diseases, so more especially by the *Plica Polonica* above mentioned. And therefore seeing that *Hercules Saxonia* in his Book of the *Plica*, Chap. 26. writeth nothing but the truth, when he saith that the humor (the Cause of the *Plica*) hath a propriety not well agreeing with the Joynts, Ligaments, Tendons, Nerves, and all the Membranes; but a certain familiarity with the Hairs and the extreame part of the skin: I conceive that I may also as rightly Assert that the Humor the Cause of the Gout hath a certain kind of familiarity and natural alliance with the Bones; but that it is an Enemy unto the Membranous parts, if not in an occult manner, yet certainly by its Acrimony, and by its twinging and lancing faculty. For very probable it is, seeing that the Bones as also the Ligaments and tendons, are nourished by a Blood that is more Earthy, as having an alliance with the Tartarous humor; that other Tartarous humors also (as well the thick, as the subtile) are thrust forth more unto the Joynts, than unto any other parts; and more especially unto the Joynts of extreame parts, since that Nature (as much as possibly she can) is wont to thrust forth the vitious humors from the principal places unto the most remote parts. For although it be so sometimes that Nature doth not presently thrust forth into the extreame Joynts of the Feet or the Hands the matter that is the Cause of the Gout, but that it stops and staies in the mid'st of some Joynt; yet notwithstanding afterwards when the pains begin Nature (if she be yet any thing strong) driveth back again into the greater Veins the Matter by the same waies by which it flowed in; and from hence she thrusts it forward even unto the extreame Joynts: touching which, as also whether there lie any thing hid in the very Bones themselves that may make for the exciting of the Arthritic Paroxysm, we shall speak more hereafter in the eighth Question.

Secondly, As touching these humors (that are the Cause of the Gout) where they are Generated, and by what waies they pass into the Joynts, the Opinions of Physicians are various and different; of which we shall speak further in the seventh Question. But now that I may in few words comprize the sum and substance of the thing in question; seeing that all swellings, and the preternatural Collection of humors in any part, is done two waies; to wit, either by Congestion by which the humor is by little and little collected and heaped up in the part, or else by Afflux; we cannot conceive that the former of these waies hath any place in the Gout. For if by Congestion and the alone weaknes of the parts the humor should be collected in the Joynts, then the pain and swelling could not be bred so suddenly, so easily, and so evidently; and the infirm part should perpetually labor and suffer; in regard that the Cause of this distemper and pain should never be absent from it. But now, since that Persons that have the Gout are not in a continual suffering condition, but that some of them are free for six months together, and that afterward the matter again floweth unto the Joynts, and that indeed suddenly, to wit, when there is a vitious humor collected in the Body, which urgeth and provoketh Nature unto the expulsion thereof: it easily from hence appeareth

appeareth that the Gout is not generated by the collection of humors, that is not done but by degrees, now a little, and then a little. And therefore the most learned Solenander writeth truly in his fourth Sect. Consil. 24 The humor (saith he) which is by little and little collected by the vice and fault of the particle of Nourishing, if at any time it could excite pain, and hinder the Motion, yet notwithstanding there was never yet any Physitian that ever told us that it could excite the Disease we call the Gout. But this notwithstanding in the mean time I deny not, that in those who are scarcely ever well in their Feet or other Joynts, the imbecillity and weakness of the Joynts may possibly conduce very much unto the long lasting and continuance of the Malady. For the part that is infirm and weak doth not rightly assimilate the Aliment unto it self, but collecteth the excrements, and thereupon it likewise the more easily receiveth the humors flowing unto it, and the more difficultly scattereth them when they are gotten together.

The long continuance of the Gout from whence it is.

Peculiar kinds of the Gout.

Felix Platerus indeed maketh mention of a certain peculiar kind of Gout; such almost as we shall likewise make mention of a little below (in the Sixth Question) out of *Erastus*; which is excited, not by the matter that floweth from elsewhere, but from the excrement that is heaped up together from the Blood about the Region of the Joynts, the place affected being extremely weakned from the many fluxions, and there heaping together new excrements, and causing a pain that is not very grievous or intollerable, which produceth a moist and watry kind of swelling rather than any other; and he asserts it for a most certain truth, that those who are thus affected are very seldom or never free from the Gout; and sometimes by reason of the affluence of the humor, and sometimes again by the congestion and heaping of it up; from the one or the other of these Causes they alwaies carry about with them certain signs and tokens of the same, and are continually suffering something or other by reason of it.

But the truth is, this is no peculiar kind of the Gout; and if so be that it differ from the Gout which we have described, it is not then the Gout, but rather a moist and watry swelling in the Feet. And hence it is that *Platerus* himself confesseth that it very seldom or never first beginneth of it self, but that it is wont to follow some other that was caused from affluxion. To wit, by pain, and the long continued and frequent afflux of the humors the Joynts are so weakned, that they cannot rightly concoct the Aliment that floweth unto them; much less assimilate the same unto themselves; and hence it is that there are many Excrements collected; and these being heaped up do excite that moist and watry swelling without any grievous pain: which swelling notwithstanding (if the pain proper unto the Gout be not present with it) is not properly the Gout. But if the true *Arthritis* or Gout be joyned together with it, the debilitated part cannot then without much difficulty, and long time, discuss and scatter the humor that hath flown unto it; and hereupon it hapenneth that before one humor be dispersed (which as *Hippocrates* writeth, is seldom or never before the fortieth day) another humor floweth unto it, and so the sick Person may seem continually as it were to be afflicted with the Gout; or likewise, if the Afflux be but by short intervals, he is in very deed perpetually troubled therewith.

From whence the Afflux proceedeth.

How and from whence the Afflux is in the Gout.

But now, in what manner, and from whence this afflux proceedeth, here likewise Authors seem to differ much among themselves. But if waving and laying aside Authority, we heedfully attend and observe the thing it self, and those things that are done about the sick person, we shall easily perceive that this Afflux is by the Veins and Arteries. For in such as are troubled with the Gout (upon the very first approach of the Paroxysm) the Vessels that tend unto the Hands and the Feet, and are inserted into the extrem Joynts, are wont manifestly to swell. And then again, this Disease doth suddenly invade, and the afflux is wont to be very sudden, which cannot happen but only by the Veins and Arteries. And moreover, it easily passeth out of one place into another, especially if cooling and repelling Medicaments be applied unto the part affected; and that pain that but even now afflicted the Foot, this Foot is no sooner freed therefrom, but it presently beginneth to afflict the other Foot; or the hand. Or, if Nature lie under the burden, and be not able to expel those vicious Humors (these sticking fast about the Bowels, and especially about the Heart) there are then excited Streightnings of the Heart, and faintings, with swoounding fits (as I have oftentimes observed) which cease not until that the vicious Humor be again driven out into another Joynt: which motion of the humor cannot be but by the common Vessels. And furthermore, Feavers (as wel continual as intermitting) are sometimes terminated into the Gout; which could not be, unless the matter were in the Veins. And lastly, a Feaver is wont to happen, and a change in the Pulse, which sheweth that the Humor is contained in the Veins and Arteries.

And

And therefore seeing that this Humor (the cause of the Gout) is contained within the Veins and Arteries, and out of them poured forth into the Joynts; without doubt it must of necessity be generated in some Concoction of the Blood, and indeed such a Concoction as out of which the Veins and Arteries receive that Humor which they contain: and this we determine to be in the Liver and Spleen, the Sanguification being there hurt in its own manner.

But now, the Causes (by reason of which this humor is generated) are two: The former whereof is something amiss in the Liver and Spleen, and more especially the excessive heat and driness of those parts; and then the other cause thereof (this being indeed the chief and principal) is such a kind of Aliment from Meats and Drink as maketh a continual supply of such a like Tartarous matter.

As for the first of these, The Stomach may indeed likewise confer somewhat hereunto, if in it the Chyle be not rightly elaborated; and if that after this Concoction the Tartarous feces or dregs be not most of them instantly separated: and hence it is also that all Physicians warn us in the preventing of the Gout, to have a special regard unto the first Concoction: and yet notwithstanding that hurt Concoction of the stomach doth not most immediately conduce unto the generating of the Gout, but that there is a necessity that the Concoction in the Liver and Spleen should likewise be hurt. For if there be any thing amiss in these (which cannot indeed very easily and determinately be demonstrated and made to appear) is then cometh to pass that the unuseful parts, salt and tartarous (which are in the Chyle) cannot be rightly separated, but remain mingled with the blood, and together with it are derived unto the Veins. And by reason of this Vice and fault of these Bowels it happeneth that oftentimes from Meats and Drinks in themselves not very hurtful some persons are very easily offended; and on the contrary, others that have strong Bowels (in whom the Concoction of the blood, and the separation of the excrements is rightly performed) although they usually feed upon meats apt to breed the Gout, and fill themselves also with Wine (and that likewise none of the wholesomest) they are not yet for all this at all troubled with the Gout.

But what this distemper of the Liver and Spleen is, cannot so easily be explained and unfolded. And yet nevertheless, if any one shall determine it to be a hot and dry distemper, I shall not at all gain-say him. But in what manner this hot and dry distemper doth effect what hath been said, this is not so clear. *Franciscus Vallesius* tells us for a truth, That by this distemper there is strongly pressed forth a water from the rest of the Juices; which is not probable, unless it be fitly explained. For this we willingly grant, That if the Liver be more hot and dry than what naturally it should be, instead then of a moderate Elixation or boiling there will be a certain Affation or roasting; and so the blood that is generated must needs be sharp. Others affirm (and indeed not unfitly) that the Liver and Spleen when they are vehemently and intemperately hot, attract the serous and salt Juice in the Food, which ought to have been separated and evacuated in the first Concoction, and so it comes to be mingled together with the blood. Yea, and haply also in the distempered Liver it self and Spleen the Blood is not well elaborated; and something there is left remaining therein that ought by right to have been separated, which being afterwards heaped up in the Veins is the cause of the Gout.

And I am of Opinion that the very same happeneth in the Liver and Spleen, that happeneth in the Reins. For many there are that eat Cheese and other meats that are very apt to breed the Stone, and yet notwithstanding they do not generate the same; whereas others on the contrary, in whose Reins there is a sandy, gravelly, and stony constitution (as *Fernelius* calleth it) or a power in the Reins of breeding the stone, these are easily offended by the meats aforesaid. And I conceive that the case is the same in the Gout; and that there is a certain vicious constitution in the Bowels of those that are troubled with the Gout; and I am of Opinion that this vicious Constitution is the efficient cause of that Salt, or Tartar, by reason of which that Humor which is the cause of the Gout is produced, which when it once cometh to abound, it is then afterwards thrust forth unto the Joynts. And this vicious constitution is communicated unto some from their Parents; and by others it is contracted from the use of Meat and Drink of a like Nature, and likewise from the Errors they commit in the whole course of their Dyer.

And moreover, Although the faculty of the Bowels be well constituted; yet if the Meat and Drink abound with such a like Tartarous matter, it cannot all of it be evacuated by Nature, in regard that neither in the first Concoction, nor yet in the second, it cannot be separated as it ought to be, but remains still mingled with the Blood. But yet in the mean time

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the gout.

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(as much as may be) it is altered by Nature, and by her spiritualized also (if I may so speak) or as *Mercatus* speaketh, it is attenuated, poured abroad, and changed into a thin, spiritul, and sharp humor, which is afterwards by Nature thrust unto the Joynts. For the Joynts (as I said before) are parts that are weak, and extream, bony, and bloodless, unto which Nature is wont to thrust not only the serous Humors, but whatsoever likewise hath any alliance at all with the Humor that floweth. But now the imbecility of the Joynts is either Native or acquired. It may then be said to be Native, when either the Joynts themselves in their first structure are more loose, softer, and more apt to receive the Humors flowing unto them; or else when they have either from the Parents, or from the Grand Parents thus affected, by a right of Inheritance (as it were) contracted this distemper and weaknes. But it may then be said to be acquired, when the Joynts are weakned either by overmuch labor, excess and injuries of the Air, or other Causes altering the Joynts.

The weak-
ness of the
Joynts
is twofold.

Why the
Humor is
moved to
the joynts.

But now, that the Humor which is heaped up in the Veins, and about the Bowels, should be moved unto the Joynts, this cometh to pass, Because that Nature being stirred up, and forced by the abundance of vicious humors, attempteth the expulsion of them. And yet if any thing happen that may move the humors, the Paroxysm is then more easily excited. And this cometh to pass if any one be provoked to wrath, or stricken with terror, or any other vehement affect of the mind, or if any shal be very hot, and then suddenly cool again on one and the same day, or else shal exercise himself immoderately, or make use of the Bath unseasonably. And this is likewise done by the retention of the usual and accustomed sweat, or the excess in qualities of the Ambient Air, and the change thereof; and more especially that change that is made at certain times of the Year: and it is manifest by Experience, that about the beginning of the Spring, and Autumn, the Blood is moved and stirred up and down in the Body; and if there be any thing faulty in it, Nature is wont to expel it unto the more ignoble parts; from whence arise scabbiness, the *Erysipelas*, Feavers, Gouts, and many other Diseases, according to the various disposition of bodies.

The Antec-
edent
causes.

From all which it is easie to find out the Antecedent, Procatartick, and altogether remote Causes, as also the external and internal Causes; which (of what kind soever they be) either they make for the generating of the matter and humor producing the Gout; or else they weaken the joynts; or else lastly, they so cause it that the humors are moved and excited.

But since that these are various, and that some of them do concur more waies for the generating of the Gout than others, they may therefore be considered according to those things we call Things not Natural.

Air.

And first of all, As for the Air, We have already said that in the Spring time the Gout is most chiefly excited; and then again in the Autumn, by reason of the motion and change of the Humors that happeneth at that time. And the truth is, the Gout is wont in the Spring time most especially to infest the party, because that the humors that have been all the Winter long heaping up, are wont then to be poured abroad, and moved up and down, as *Lucian* telleth us in most elegant Verses making a description thereof, in his *Tragopodagra*.

And the very same may likewise be sometimes effected by other distempers of the Air: and like as the moist Constitution of the Air doth otherwise produce Catarrhs and Fluxes; so it likewise oftentimes causeth the Gout. And without doubt that Epidemical Gout (of which out of *Athenæus* we shal anon in the first Question make mention) was at first produced by some peculiar Constitution of the Air.

And moreover, the Course of Dyet that is observed doth make very much for the generating of the Gout; and especially the drinking of strong Wines, by which alone many have attracted the Gout unto themselves; as *Quintus Serenus* writeth of *Ennius*.

And indeed there is no one thing that is more offensive and hurtful unto persons that are troubled with the Gout than the drinking of Wine, as we find it to be true by common experience. For there is nothing that obtaineth more of that Tartarous matter (or call it what you please) that is so apt and fit to generate the Gout than Wine.

Which matter although (as we said a little before) it may in some stronger bodies be separated; yet nevertheless, those that find themselves subject to the Gout, having but weak and infirm bowels, have no reason (after the example of other insatiable Wine-drinkers) to indulge themselves any liberty in the drinking of Wine; but it is far more fit for them to abstain from it. And so on the contrary, many have been freed from the Gout by their abstaining from Wine. And *Trincavel* (in his twelfth Book, and second Chapter, of the way of Curing the several parts of Mans Body) writeth that he knew a very aged Physician at *Venice*, who having been exceedingly troubled with the Gout all his life long, even unto his old Age,

The gout
cured by
abstinence
from wine.

Age, at length by abstaining from Wine for five yeers only, he came to be so freed from all those troublesom and painful fits that attend the Gout, that he was ever after (even to the very last of his old Age, and to the hour of his death) altogether freed from these pains. And *Franciscus Alexander* (in *Descriptione Diacorallii*) writeth likewise that one *Francis Pechius*, a man fifty yeers of age, and troubled with the Gout, was cast into Prison by a certain Marquess, and there kept twenty yeers; and that he was ever after this freed from the Gout. And *Solenander* also (in his 5. *Señ. Consil. 1.*) relateth of a certain Widow, a Spaniard born, that having omitted and left off the use of Wine (which yet notwithstanding she had but very sparingly made use of after the custom of her Country, and alwaies diluting it with Water) she was never more after that troubled with the Gout. And there are many other such like known Histories of them that have either been cast into Prison, or else have been reduced unto poverty, and so have of necessity abstained from Wine, and thereby been freed from the Gout. To wit, whereas the next and most immediate Cause of the Gout (as we likewise told ye before) is some certain thing that hath as it were the Nature of a Mineral, and this altogether unfit for the nourishing of the body (such like as is to be found in al kind of Earths, but yet in some more, in some less) the Vine attracteth it more powerfully than other Plants (and that this is so, appeareth even from that Tartar which is to be found more abundantly in the Vine than in any other Plant, and in that Vines wil grow and thrive in those places wherein other Plants wil not prosper, as not having aliment enough; the Vines contenting themselves in a manner only with that very salt of the Earth) which afterward together with the Wine (although variously changed) is derived into Mans body, and being there heaped up it affordeth matter unto the Gout.

And yet notwithstanding there are likewise some kind of Meats and Drinks that make very much for the breeding of the Gout; and there are sometimes Waters to be found that generate the Gout; and in those places where the Gout is Epidemical not only the rich that drink Wine, but the poor also that drink Water, are afflicted with the Gout. And so likewise *Julius Alexandrinus* writeth (in his fiftenth Book of things that are wholsom, and sixt chapter) that he knew a certain person troubled with the Gout; in whom by the eating of Carps and Breems the Gout was perpetually bred. So that he could when he listed by this means bring the Gout upon himself. And moreover, Wines they are not al of them of one and the same kind. For some of them proceed from a sandy Earth, and contain less of this Tartarous matter. And such are those Wines that grow at *Jassen* (a Town hard by) called *Gorubergensian Wines*; which although that they be drunk in great abundance by the Inhabitants of that place, yet I never heard of any of them that was there troubled with the Gout. And such Wines as these are likewise to be found in many other places. But on the contrary, those Wines that grow in an Earth that is fat, muddy, clayish, stony, and that hath in it a Mineral Marl, gravel, stones, or any thing else that is Mineral mingled with it, are very apt and ready to generate the Gout; and such are the Wines of *Moravia*, *Bohemia*, *Hungary*, and most of the Wines of *Austria*. And although that the Wines that do not generate the Gout leave oftentimes in the Vessel more Tartar than those Wines that do indeed produce the Gout; yea, and if they be distilled, there is likewise more of the said Tartar found in them than there is in these (like as at *Uratistavia*) as that eminent and famous Physitian Doctor *Doringius* wrote unto me, of twenty four measures of *Renish* Wine there were found almost three ounces of Tartar; whereas in the distillation of as many Measures of the *Tocavian* Wine, that is accounted the strongest of al the *Hungarian* Wines, there were scarcely two drams of Tartar to be found, yet nevertheless al this maketh nothing against what we have said. For those Wines have that Salt or Tartar superficially only (as I may so say) and in a thick manner mingled together with them; or (that I may speak with the Chymists) they have the Salt as yet fixed; but these have a volatile Salt or Tartar most exactly mingled with them, insomuch that this Salt and Tartar is in a manner made spiritual; whereupon it is, that the former of these is more easily separated either in the Stomach, or in the Liver, and so is thrust forth either by the belly with the rest of the excrements, or else it is voided by Urine; but this other being mingled with the spirit of the Wine passeth into the very Mass of the blood, and so penetrateth into the most inward parts of the body. And that those Salts that were fixed may be made Volatile, the Distillations of Chymists do sufficiently prove; and that the Tartar may be made as it were Spiritual, and elevated by the Alembick, this we are taught by the Tartarized Spirit of Wine: yea, and Metals may also be so dissolved in strong Waters and Spirits, that they may not only be strained through paper, but that they may likewise be elevated into the Alembick: But yet nevertheless

The gout
caused by
the eating
of Carps.
wholsom
Wines.

Wines un-
wholsom.

theless, in regard that this Salt although it be subtile, is altogether unfit for the nourishing of the body, as partaking of a Mineral Nature (which is not fit for the nourishment of living Creatures) albeit it doth together with the blood penetrate into the Veins; yet notwithstanding as superfluous and useles it is at length by Nature cast forth of the Veins and Arteries, and thrust out unto the Joynts. And therefore, whether or no Wine be apt to generate and cause the Gout, we are in the first place to judg of this by the place where it groweth, and its effect; and then next of al by the strength therof. For by how much the stronger Wines are, by so much the more exactly and subtilly is this Salt mingled with them, and becometh more spiritual: like as it appeareth in the Spirit of Wine that is Tartarized, which is more strong than the simple Spirit of Wine.

All which notwithstanding is thus to be taken, if by reason of the distemper and weakness of the Bowels (as we also said before) that which in the Wine is Excrementitious and Tartarous, may not be separated. For if it may be separated, the Wine wil then be wholesom, and without any hurt in it. Yea, and if any such Wine could be had that having but little of such a like Tartarous matter in it should yet strengthen the weak Bowels that do not wel separate these Excrements, and so shal help the Concoction and promote the separation and evacuation of the Excrements, we grant that this would prove to be not only harmless, but likewise very useful and profitable if moderately drunk. And some tel us that the *Pucine* Wine is such, and therefore they commend it for the prevention of the Gout. But I much doubt, whether this Wine be in al respects answerable unto what hath been said; and therefore I conceive that it is good first to make trial, and to consult with Experience.

wine, how
it doth ge-
nerate the
gout.

We have indeed above spoken something as touching the cause for which certain Wines breed and cause the Gout: but yet nevertheless, my desire and purpose is here to explain the thing, and so to make the matter somewhat more cleerly to appear. I think it to be a very plain and cleer truth, that Wine produceth the Gout, not as it is Wine, but as it containeth in it something that is unfit, and something likewise that is extraneous, and unuseful unto our bodies, which is therefore by Nature thrust forth unto the Joynts. And this appeareth if by nothing else, yet by this, That there are some certain Wines that do not generate the Gout; and such are our *Gorubergensian* Wines, and many others also, that here in these Regions grow in Sandy places. For albeit these Wines be drunk for a dayly and ordinary drink, and that not scanty, but very plentifully; yet there was never any that from hence contracted the Gout. But on the contrary, the *Moravian*, *Bohemian*, *Austrian*, *Hungarian*, and likewise very many more Wines of other Regions, are most apt to breed the Gout. Yea, and not only the Wines, but even the Waters of some places, do generate the Gout. And so it was related unto me by that eminent Physitian, *Dn. D. Tobias Knoblochius*, that at *Iglavia* in *Moravia* (where he had practised Physick there for some years) that not only the Wealthier sort of People that drank Wine, but even the poor who hardly ever tasted a Cup of Wine, were al of them very subject unto the Gout, Colick, and Falling-sickness, Diseases Epidemical in that place.

In certain
places wa-
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the gout.

what that
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gout.

But now, Inquiry is to be made, What that should be which maketh that certain Wines are apt to generate the Gout. Where we are first of al to take notice, that nothing doth nourish (touching which we have spoken elsewhere) but what proceedeth from things animated, or enlivened. And therefore al other things, as Minerals, Metals, and divers kinds of Earths, are unapt to nourish our bodies; and thereupon if they be at any time taken in, they are again to be evacuated either by the Urine, or else by the belly; and this if it be not done, they are then by Nature thrust into the Joynts, and so they there generate the Gout. And therefore those Vines that grow in a sandy Earth, that is not at al fat and rank, have nothing that they may attract and draw unto them, besides the Alimentary Juyce: but those that grow in Clayish grounds, or any other fat Earths, do not attract unto themselves only a vegetable juyce, but also a Mineral juyce as it were, and such as is wholly unuseful for our bodies, which is not unfitly termed Tartar, a substance, to wit, that consisteth of a fixed and volatile Salt, and of an Earthy and almost Mineral matter; such as not only sticketh fast unto the sides of Casks, but is likewise thoroughly mingled with the substance of the Wine. And this is altogether the Nature of Salts, that they reduce other bodies into the smallest Atomes, and then do associate the Aromes unto themselves. We may see an Experiment of this in the dissolving of Metals in strong Waters, in which the Metals (bodies otherwise thick) are so united unto the salt of the Waters that dissolve them, that they may pass through a Card or Paper. And the very same we likewise see in the dissolving of Pearls, Margarites, Corals, and Grabs Eyes, which sticking fast unto the Salt of the Vinegar, are thoroughly mingled with

with the Water, and may be strained through a Card; but being precipitated they will dissolve no further. We have likewise an Example hereof in Virriol, which being dissolved in Water may likewise be strained through a Card: but when the vitriol is Calcined, and the Salt drawn forth of it, there remaineth an Earth that is not dissolvable by any liquor whatsoever. And so in hot Baths of Water there is an Earthy substance so exactly mingled therewithal, that it cannot possibly be discovered by any sense. But yet when this afterwards shall stick fast unto the wooden and stony pipes, and shall sublift apart by it self, it is not then any further to be dissolved in Water. From all which it appeareth that the Gout is not generated without Salt; and without doubt the sharpest and most extream pains in the Gout are from Salt: but yet we say not that Salt alone, pure Salt doth this; since that there are Wines in many Regions that have Salt also, and yet for all that they do not generate the Gout; but there concurrerth moreover a matter that is Clayish, Limy, Marly, or some Mineral which the Vine had attracted out of the ground, together with the nourishment, concocted it, and mingled it with the Alimentary matter, and so communicated it unto the Grapes; and hence the Wine also that is pressed forth of the Grapes receiveth and reteineth it. And hereupon it is that we see, how that in the Joynts of such as are troubled with the Gout there are sometimes generated hard knobs and knots, and that there is as it were Lime taken forth of them; which indeed is nothing else but that same Mineral Matter which the Salt of the Wine drew along with it, and which at the length (as altogether unuseful and unfit for the nourishment of the Body) is thrust forth unto the Joynts. Now therefore (that we may come unto the Question, why some Wines do generate the Gout, and others do not so) the more any Wine hath of this matter, and this thoroughly mingled with it by the smallest Atomes, by so much the more powerful it is for the generating of the Gout. Which cometh to pass, in the first place, by Reason of the soyl, to wit, where the Wines grow, whether in a Muddy ground, or that that is Clayish, Limy, Marly, or any other Mineral Earth. And furthermore in the Second place, if the Wines shall not be wholly purifyed and freed from their Tartar, but still remain as it were thick and turbid; and this happeneth first of all in Wines that are new, and not yet wrackt by turning them from Vessel to Vessel; and then Secondly in some certain Wines that wil never be altogether cleer; such as are those of *Hungaria*, &c. And Thirdly, if that Tartarous matter be so thoroughly mingled with the Wine in the smallest Atomes, that it cannot be separated from our bodies, neither in the first, nor yet in the second Concoction; which for the most part happeneth in Generous and strong Wines, and such as grow in places hotter then ordinary. For Wines that are not strong and generous, although that even these may contain in them some of the said Tartarous matter: yet notwithstanding, in regard that the heat of the Country was not so powerful that it was able (either in the Vine, or in the Grapes,) to mingle this Tartarous matter with the Spirit that is in the Wine, it is thereupon also afterwards (either in the first, or in the second Concoction) more easily separated, and driven forth either by the Belly, or by Urine.

what
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are that do
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But if by the Air of a hotter Country, that doth concoct more powerfully, that same Tartarous matter be exactly mingled together with the Salt and spirit of the Wine, it then refuserh to be severed by the separating faculty, and so penetrateth it self into the whole Body with the Alimentary part. But yet because that it is altogether unfit to nourish the Body, it is at length by Nature thrust forth unto the Joynts, and there it generateth the Gout. And that this is so, we are taught by the experience we have even of the *Hungarian* Wines. For although (as experience it self testifyeth) they be most apt of themselves to generate the Gout; yet (as we told you a little before) it is observed in the destillation of the *Hungarian*, and *Renish* Wine, that there was more of the Tartarous matter collected out of the *Renish* then out of the *Hungarian*. Which happeneth for no other cause but this, to wit, that in the Wines of *Hungary* that Tartarous matter is by the smallest Atomes so exactly mingled with the spirit of the Wine, that together with the said spirit it may likewise pass through by the Alembick.

Carolus Piso, amongst those Causes from which the matter of the Gout is heaped up in the Veins, putteth likewise moist and waterish meats for one, as broths, raw fruits, and the like. But he doth this upon a false Hypothesis or Supposition, whilest he mistakingly determineth that the Serum or whey is a meer and pure Water; whereas

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are moist
and water-
ish do
breed the
gout.

water; whereas yet notwithstanding Experience it self teacheth us the contrary; and there was never any man yet known to get the Gout from the alone use of moist and watry meats, neither indeed can waterish humors possibly excite such great and so sharp intollerable Pains.

The suppression of the wonted evacuations.

That which likewise maketh very much for the generating of the Gout is the suppression of the wonted evacuations. And hence it is that Hippocrates (in the sixth of his Aphor. 29.) writeth, that Women are never troubled with the Gout but when their Courses fail them; of which notwithstanding we intend to speak more hereafter in the ninth Question. And so the same Hippocrates writeth (Epid. 6. Sect. 8. text. 55.) that at Abdera, Phacusa the Wife of Pithous having been before (while she was young) very fruitful in bearing Children, upon a very long absence of her Husband from her Monthly Courses left her, whereupon afterwards pains and rednesses arose about the Joynts. And the very same (saith he) happened also unto Thaso the Wife of Namysias Gorgippus. And from hence likewise it is, that oftentimes those Persons are wont to fall into the Gout who have had old Ulcers in their Legs, or Fistulaes in the Arse suddenly consolidated or healed up, and the Fluxes likewise of other places wholly suppressed. For those humors that are wont to excite those long lasting Ulcers of the Legs, and Fistulaes of the Arse, are themselves also salt; and therefore if they be suppressed, they may produce the Gout.

whether every Error in things not Natural may produce the gout?

Venerie one great cause of the gout.

And here there are very many that are wont to be long and tedious in the recital of the Causes (external and internal) who wil not pass over in silence any one of those things we call not Natural. But although that every Error whatsoever in the use of the things not Natural may produce a Cacochymy; yet we deny that every Cacochymy hath in it a sufficient power to produce the Gout. And of the rest of those things that are not natural, there is hardly any of them that of it self doth produce the Gout; but only that by overmuch motion, Anger, and Fear, the Paroxysm is excited; and the retention of the sweats doth also make very much for the producing of the same; and if the Person hath been long accustomed unto those sweats, the retention and suppression of them is an Argument that the Gout is very neer at hand. But yet we grant that excessive Venerie doth make very much for the generating of the Gout, by weakning not only the Joynts and Nervous parts, but also the whole Body: and hence it is that by the Poets the Gout is said to be the Daughter of Bacchus and Venus.

The gout sometimes hereditary

whether Children begotten out of the Paroxysm or fit of the gout, may yet be subject thereunto?

whether there be any necessity that the gout should be propagated unto the issue?

The Gout is sometimes likewise hereditary; and a weakness not only of the Joynts, but of the Bowels also breeding the vitious humors, is from the Parents and Ancestors communicated to their Children and Nephews; whether this happen from the vitious seed; or else that the matter of the Blood in Persons troubled with the Gout is subject and enclined thereunto, from whence the vital spirits are generated, and all the parts do receive their nourishment. And yet notwithstanding it may so come to pass that Parents that are themselves affected with the Gout may yet beget Children not subject thereunto; and yet their Nephews may notwithstanding at the length be troubled therewith. And indeed there are some of this Opinion that those Children that are conceived in the very Paroxysm of the Gout, these shal likewise be born thereunto; whereas on the contrary, such as are conceived out of the fit of the Gout, these shal be safe and secure. But very few perhaps there are that beget Children in the very Paroxysm of the Gout: like as we see also that Epileptick Persons may out of their Fit beget Epileptick Children. For the truth is, it is not so that the very matter it self that excireth the Paroxysm is imparted unto the Children; but only a vitious disposition thereunto, which alone is not sufficient for the producing of the Gout; but that there is required likewise an Afflux of vitious humors. And therefore if those Children shal observe an exact and careful Diet, it may then so come to pass, that the weakness which they contracted from their Parents may be abolished, or else it may be corrected; and humors fit for the breeding of the Gout may not be generated in the Body. And on the contrary, it may so happen that albeit the Child may not be troubled with the Gout, yet nevertheless the Nephew may be affected therewithall, to wit, if he augment by errors in the Course of his Dyet that vice and weakness that was communicated from the Grand-Father by the Father; and so that vitious disposition that was well neer suppressed and might have been wholly abolished had he but used a good dyet, is now again by the Errors of his Dyet (as it were) renewed and revived. Unto which we may likewise add this, that the vice that is in the Fathers seed may sometimes be corrected and amended by the goodness of the Mothers Milk. And moreover these Morbifick seeds may likewise have their own times, in which they do at length discover themselves (like as we see it to be in Intoxications, and the poyson of a mad Dog) or else haply they altogether lose their strength, and so they quite vanish.

From

From all which it will be no hard matter to render a Reason why the rich should be obnoxious and subject unto the Gout rather than the Poor; it being therefore by the Germans called also the Disease of the Rich. For it is very rarely found, that Boors or Beggars are troubled with the Gout; and hence it is also that the Gout is termed a Disease *hating the Poor*: and *Jovianus Pontanus* hath likewise a Fable to this purpose (in his 5. B. de *sermon.* and Chap 1.) that on a time the Gout rambling about, and going into the Country, when it saw there nothing but little Cottages most rudely and unhandfomly built, and very filchily scituated; and could find there nothing but Mattocks and Pitchforks, Rakes, and such like Rustical Instruments; she turns away from this place as altogether unfit for her entertainment, and betakes her self to the City, if haply she might there find better. But being brought into the City, at her first entrance thereinto, she lighteth upon the Shop of a Black Smith; and this she likewise passeth by as altogether unfit for her accommodation: but at length when she had a while rambled about in the City, she at last cometh into a certain house, before whose door was piping and Dancing, and within doors nothing but Jollity and Feasting; and demanding what and whose house this was, when she was answered, that it was the house of Ease and Idleness, and that it was inhabited by slothful Persons that spent all their time in Sleeping, Drinking Wine, and Feasting, she instantly enters the house, saying, This is indeed the house, and this the Palace that is fit for my reception and entertainment. And when at any time she saw sollicitude and Labor doing their business before the doors, she presently commands them to be set further off, and driven quite away; and chargeth that all Cares whatsoever should be banished from thence; and more especially, Sobriety and abstinence.

why the Rich are more troubled with the gout than the poor?

For Poor People and such as live in the Country are for the most part contented with a very sparing and plain Dyet: whereas on the contrary, the Rich delight themselves with all variety of Meats, and drink their Wine most commonly without any stint at all; yea and oftentimes wholly addict and give themselves over to Guttering, Gluttony, and excess of Wine. And again the Boors in the Country are continually exercised with Labor, by the which the heat of the Bowels is stirr'd up; and if at any time there chance to be any vicious humor it is immediately discurr'd; whereas for the most part the Rich do more indulge themselves in ease and idleness. And moreover the Rich are very seldom so careful to obey the precepts of their Physicians as they ought to be, but they will have the medicaments prescribed them to suit with their Fancies and Palats; neither will they continue the use of them so long as is fitting and requisite; neither will they have that care and regard unto the whole course of their Diet which they ought to have.

And besides all this, in the last place, the Rich do indeed make use of Physicians, but then they change them too often; and very frequently commit themselves unto Empericks, and others that are altogether Ignorant, or have but little knowledge of the case how it standeth with them; and these do oftentimes prescribe such remedies and medicaments as by the use of which the Disease is rather more deeply and faster rooted, than eradicated and pulled up.

Now this Disease is wont for the most part to invade and afflict men, rather than Women (not that these are wholly exempted from it, for we find the contrary by experience) and this more especially between the thirtieth and fiftieth year of their Age; to wit, because about that age, by reason of the sharpness of the heat, the salt and Tartarous humor is then more heaped up; and then after this the older they grow, the more they are afflicted with it, by reason of the weakness of the native heat, and the imbecillity of the expulsive faculty. For Men for the most part live not so temperately as Women, sustain greater Labors, are more addicted to Venery, and hurt thereby. But Women (on the contrary) are more temperate, and besides they have likewise their monthly Evacuations, by and with which Nature is wont to thrust forth together with them all the vicious humors, and so to expel them out of all parts of the Body. Whereupon likewise it is, that *Hippocrates* (in the sixth of his *Aphorism.* Aphorif. 29.) writeth, that Women are not troubled with the Gout, until after their Courses fail and leave them. But the truth is, that it is not alwaies so that either Women or Men that are above or under the aforesaid age, are wholly free from this Malady; and albeit that *Hippocrates* (in the 6. sect. of his *Aphorism.* Aphorism 30.) writeth, that yong Men before the use of Women are not at all troubled with the Gout; and that it is a thing very rarely seen, that Youths are herewith affected, yet notwithstanding its sometimes found so to be, and that even these are troubled with it: as we may likewise see many that are above fifty yeers old taken oftentimes with the Gout. And I my self of late saw a Learned Man that in the sixty second year of his age was first of all troubled with

who they be that are most subject to the Gout.

fits

fits of the Gout. Neither also are Eunuches (although that *Hippocrates* in the *Sixth Sect.* of his *Aphorism.* *Aph.* 28. doth except them) alwaies wholly free from this Malady; as we shal anon shew you further in the *Ninth Question.*

Chap. 3. Signs Diagnostick.

The Diagnostick
signs of
the gout.

THe very Malady doth sufficiently appear of it self; and the sick persons complain of a pain about the Joynts in their Feet, Hands, Knees, and other parts; unto which there is afterward added a swelling, a redness, and for the most part a Feaver. And indeed, when the Gout begins first of all to invade a person, it likely taketh him first in the great Toe of his Foot, and that most commonly the left. And so in all the other joynts the pain most of all consisteth and staieth in the place affected, without spreading any further. But in the *Sciatica*, this pain is not felt only in the Joynt, (by the which the Head of the Thigh is inserted into the Hip) but it is from hence by the Nerves and Membranes carried unto the very Buttocks, by the way where the Nerves spring from the Loyns, and the great bone by the Latin Physicians called the *Os Sacrum*, or holy Bone; and from thence the pain is also extended unto the Calf of the Leg, and unto the Foot, according to the guidance and conduct of the Nerve. And in other Joynts also, (as lying outwardly) there is wont manifestly to appear a swelling, and redness, and a great heat to be perceived: but now in the *Sciatick* painful affect these things do not so plainly appear, in regard the place affected lieth very deep, and because that therein that place the top of the Skin hath not many Veins dispersed here and there in it. In a word; in the Gout that which most especially troubleth the sick person is the pain he feeleth, and an impotency in his motion; and upon this there follow watchings and restlessness, a dejection of the Bodies strength, and other Symptoms; all which *Lucian* in his *Tragop dagra* hath very elegantly described.

The signs
of the
Causes.

But now in reckoning up the signs by which the differences of the Causes and the different Humors may be discerned, the most of Physicians are very long and prolix; and they take much pains in reckoning up the signs of the Gout from the blood, Choler, Flegm, and Black Choler or Melancholy. But since that (as we told you before) those Humors cannot properly be said to excite the Gout, but only that they are either stirred up and down by that Humor that is the Cause of the Gout, or that being attracted by the pain of the part affected they flow together thereunto; We shall therefore in this regard here spare our selves the Labor, further to treat of them.

But yet Nevertheless, if for the better ordering of the Cure the knowledge of the fluent Humor seem to be altogether necessary and requisite; it appeareth from the general discourse of an inflammation; in which we have declared what a pure *Phlegmone* is, and what signs it hath; as also the signs of *Oedematodes*, of *Erysipelatodes*, and also of *Schirrholders*, what signs these have; and indeed from the signs of the Humor predominant in the Body (which we have elsewhere explained) and likewise from the qualities of the swelling, and by the observing of those things that benefit or hurt the sick person, it may easily be known what humor it is that floweth together with it.

And yet notwithstanding it is here acknowledged by the more learned and able Physicians, (even those who have asserted that the Gout proceedeth from divers humors) that there is little heed to be given, or regard to be had unto those signs that are taken from the Color, heat, or the like Accidents; since that very many things occur which may be the Cause, as of the Colour, so likewise of the heat and coldness of the Member, contrary unto the Nature of the peccant Matter. For the humor (as *Guainerius* saith) that is the true and proper cause of the Gout, abiding in the bottom of the Member, doth not for the most part change the superficies of the said Member; and so then the Color of the Member cannot afford us any sign or token at all: but it may possibly so happen, that a Humor abounding in the Body may by pain be stirred up and darwn unto the place affected, and there it may cause a swelling, and yet nevertheless it may not be the Cause of the Gout.

Chap. 4. Prognosticks.

I. **T**HE Gout for the most part is a disease not Mortal. For albeit that the strength may be much impayred by pains, and for want of rest, (insomuch that the sick persons may at length be forced to take their Beds) yet this is not done, but in a long time. And we see that such as are troubled with the Gout do oftentimes live long, and attain unto old age; to wit, for this Cause, that Nature by certain intervals thrusteth forth unto the Joynts those vicious Humors from which other more dangerous Diseases might have been generated; and so by this means freeth the principal parts from vicious Humors. Prognosticks of the gout.

II. If yet notwithstanding there happen any dangerous inflammations, or pernicious Feavers, or that Nature fayl and lie under the burthen, so that it can no longer expel the vicious Humors, the Patients life may then be much endangered. And if any such dangerous Symptom be Joyned together with the vehement pain of the Joynts (as suppose, a Deliry, the trembling of the heart, difficulty of breathing, cold sweats, and a weak pulse) it is then a sign that the sick person will die the very same day, or the day following.

III. But although the Gout be for the most part a Disease not Mortal, yet nevertheless it is very hard to cure; and it is commonly accounted the shame and disgrace of Physitians. For albeit (if the Disease be new) it may be cured without much difficulty: yet nevertheless, if it be long delayed, and that it often invade the party, it may be more difficult to cure, in regard that the Joynts, yea and the very Bowels are weakened by the pains, and restlessness, and likewise by the afflux of the Humors. And the sick persons are themselves oftentimes the Cause that this Disease taketh such deep Root in them, seeing they do not oppose and withstand the Disease at its first Invasion; yea and oftentimes they conceal it; and some there are that will pretend other Causes of their Disease, as loath to acknowledg it to be the Gout.

But now this Disease proveth afterward very hard to cure, both in regard of the many errors in Diet (from which the sick persons will not be perswaded to abstain) and oftentimes also through the unskilfulness of the Physitians; who are either Ignorant of the true cause of the Disease, or else they administer Medicaments that are very unfit and improper, by which they do rather weaken the Joynts and the Bowels then any waies strengthen them. But yet nevertheless, in the mean time, the Gout is not a Disease that in it self is altogether impossible to be cured; and this we are taught by the examples of many that have been freed from the Gout; of which more anon in the *Tenth Question*.

IV. Whosoever they be that being thus affected are grown in age, or have gotten about their Joynts *Callous* and hard knobs bunching forth; or that live an anxious and careful life; or have a dry and costive belly; these can none of them be cured by the Art of Man, or any human means, so far as I could ever yet find. *Hippocrates* in the Second of his *Predictions*.

V. If in the Gout there happen to be a loosening of the Joynt, it is then very difficult in the curing, or indeed altogether incurable. For although the Joynt may possibly be set back again in its proper place, yet nevertheless because that the Ligaments of the Joynts are made more loose, a perfect Cure is scarcely to be expected. And if likewise in the loosning that followeth upon the Gout the Cavity of the Joynt be filled up with a hard knotty matter, the Disease is then altogether incurable: for the Joynt cannot be put back again before that Tophaceous matter be taken away; and this will hardly ever be removed.

VI. Among all the several kinds of the Gout, the *Sciatick* pain is of all others the most grievous, not only in regard of the greatness of the pain it self, but by reason also of the grievousness of the Symptoms that follow thereupon. For by reason of the most grievous pain it causeth watching and a restlessness, kindleth fevers; and sometimes a loosning of the Joynt happeneth, upon which there followeth a lameness and a wasting away of the whole Leg and Thigh. For if at any time a Joynt fall out of its place, by reason of the multitude of the affluent Humors, there

is then a Necessity that an halting and lameness must follow upon it. But because that the bone being fallen out of its proper place presseth together the Muscles, Veins, and Arteries, the Aliment and Spirits cannot possibly flow into the lower parts, whereupon there followeth a wasting and Consumption of them.

VII. But although this *Sciatick* pain be of all others the most vehement, yet notwithstanding, it doth in the beginning more easily admit of a Cure than any of the other kinds of the Gout, in regard that the strength and Virtue of the Medicaments may more easily penetrate unto the Vessels, (by which the Humor floweth into the Hip) then unto the extream Joynts; and so likewise the Humor that floweth unto them may the more easily be evacuated. But if the Humor be once flown in, so that it hath insinuated it self into the Hip, it is then very hard to be cured; because that the Discussing Remedies by reason of the flesh lying upon the Joynt cannot penetrate whither they ought to go.

VIII. *They that having been long infested with the pain in their Hips have the Hip falling forth of its place, and again returning and falling into its place, these have snotty Excrements following thereupon, (as Hippocrates telleth us in the sixth Section of his Aphorism. Aphorif. 59.) these Mucous and snotty Excrements having their original from the weak heat of the Nervous parts.*

IX. *They that having been long infested with the pain of the Hips have the Hip falling out of Joynt, these have their Thigh wasting, and they become lame, unless they be burnt: as Hippocrates tells us in the same place, Aphorism. 60.* The Thigh indeed consumeth and wasteth away, because it is but ill nourished, by Reason of the weakness of the Native heat from the long continued afflux of the Vicious Humors; and because that the Veins and Arteries are moved out of their places, and pressed together, so that they cannot rightly bring the aliment unto the Thigh. But then they become lame, and halt, because that the Thigh for want of nourishment is destitute of strength, and by Reason of the Luxation or disjoynting is become shorter then before, and that by means of the looseness of the Ligaments the Thigh bone is not fast and firm.

X. Those unto whom the Gout is hereditary are scarcely ever wholly freed therefrom; and if they desire so to be, they have need to observe a far more exact kind of Diet and a more accurate use of Medicaments, then do others that are either not troubled at all with this affect; or if they be, the grief descends not to them from their Parents, or any of their Ancestours.

XI. If the *Varices* happen unto such as are troubled with the Gout, the Gout then ceaseth, (as *Avicen* tells us, because that the Humors that were accustomed to flow unto the Joynts are now derived unto the exterior parts of the Thigh.

XII. If the Gout that was wont to keep its certain Periods cease and return no more, it proveth to be the Cause of most grievous and deadly Diseases, unless the matter be drawn forth by way of prevention, which is most difficult to be done. For the matter that Nature was wont to thrust into the joynts, if by Reason of the weakness of Nature it can be now no longer expelled, either it sticketh about the Bowels, and principal parts; or else being transmitted unto the Lungs, Intestines, or other parts, it there exciteth most grievous Evils.

XIII. As for what concerns the very Paroxysm it self, touching this *Hippocrates* writeth in his sixth Sect. and 49. *Aphorif. They that are troubled (saith he) with the Disease of the Gout, these may in forty daies be cured of their fits, by removing the inflammation; provided that (as Galen adds in his Comment.) The Physitian fail nothing in the Cure, and that the Patients be obedient unto his prescriptions. For seeing that the Humors in the Gout are dispersed by the Ligaments, Membrans, and Nerves, and that these parts are more thick, and more cold then the fleshy parts, it is therefore no wonder at all, that there is a longer time for the discussion of the Humor required in these parts, then in the fleshy parts. But yet this Aphorism is here only to be understood of the last and very utmost term; seeing that experience testifieth, that many have been Cured of the Gout within fewer then forty daies. For in some the fits of the Gout are more moderate, and shorter, and so may be made to cease in a shorter time: but in others they are more sharp, and of longer continuance; and therefore require the longer time. And some there are that refer the cause unto the Humors; and those tel us for a truth, that the Gout which*
proceedeth

*whether
the Gout
may not be
finished in
less then
forty daies
and why?*

proceedeth from Choler is shorter, but that which is from Flegm of longer continuance. But be it so indeed, that sometimes the Blood, sometimes Flegm, and sometimes Choler may together and at once flow unto one and the same part; yet nevertheless, that very Salt Humor which is the next and most immediate cause of the Gout is sometimes thinner, (so that it may be the sooner and more easily dissolved) and sometimes it is more thick. Unto which we may in the Second place add, the strength or weakness of the part affected. For the stronger the part is, the more easily doth it dissolve the Humor that hath flown unto it; but the weaker it is, the more slow it is in dissipating the said Humor; and from hence it happeneth that those which first begin to be troubled with fits of the Gout have these fits shorter; and in such as have been longer troubled with this Disease the Paroxysms are of so much the longer continuance, unless they have the greater care of themselves. For the oftner any member is afflicted with the Gout, the weaker still it groweth. And Thirdly, the sick persons themselves also do not observe one and the same course of Diet; whereupon it is, that such of them as observe an accurate and exact kind of Diet, these are more easily freed; and some of them do by the Errors of their Diet much prolong unto themselves their Paroxysms, and give the Cause of a new fluxion.

XIV. The more, and the more frequent the Symptoms are that follow upon the Gout, the harder is the Disease to be cured. For sometimes by Reason of the most sharp and vehement pain, the sick persons do unseasonably desire repelling and stupefying Medicaments; which drive back the Humor that was flowing unto the Joynts unto the more noble parts: and from hence it happeneth, that the sick persons fall into the affects of the Heart by Reason of its being streightned; into Faintings, and Swoounding fits, or other mischievous Diseases: yea and they may be cast into great peril of their lives; and then the only hope they have of escape lieth in this; to wit, that the aforesaid Humors (if it possibly may be) be again driven back unto the joynts.

XV. Now there are four manner of waies to dissolve and cure the Gout. For first of all (and more frequently) the matter is resolved, and indeed all of it, so that there are not left so much as any footsteps thereof remaying; or (as for the most part) nothing but the very signs and footsteps of it are left behind. And Secondly (but this is more rare) the matter is changed into a substance very like unto Pus. For a true and genuine Pus it is not; but a certain *Sanies*, or thin Ichorous Excrement, sweateth back and Eaterh its way through both the Flesh and the Skin.

But now why the Gout cometh so seldom unto a suppuration, is well worthy our consideration, and enquiry. Some are of this Opinion; that it is therefore because that the joynts are removed from the Fountain of heat, and have not in them so much heat as is requisite for a suppuration. But that this is not the true cause, appeareth by this, that sometimes there ariseth an inflammation in the ends of the Fingers, which yet nevertheless cometh unto a suppuration. And therefore a more true cause seemeth to be this, to wit, the Nature of this very Humor it self, (as being Salt, and wheyish) which is not to be changed into Pus; but it is either inwardly dissipated; or if any of it be left remaining, it groweth and hardneth into knors and knobs. The Third way and manner is, when by Reason of the weakness of the place, the matter sticking over long in the part affected, is at length turned into a knor or knob. And of such a Gout as this it is that Galen writeth (in his 10. B. of the *Composit. of Medicam. according to the place, and 2. Chapt.*) after that the Calli are once produced, (saith he) there is no further hope or expectation, that the Joynt should ever exactly return unto its pristine Constitution. And of this the Poet; Tollere Nodosam nescit, &c.

*That Physick worketh rare effects, ther's none can doubt,
And yet it knows not how to Cure the knotty Gout.*

The Fourth manner is, when the Humor is transferred, and carried unto some other place, and (as it sometimes happeneth) unto the more noble Members, to wit, the Lungs, the Heart, the Brain; and this of all other the changes is the worst, and by reason whereof the sick persons die, unless the matter be drawn back again unto the joynts; and sometimes the Humor is translated unto the more ignoble parts,

parts, as the *varices*, according to what we said before in the 11. *Prognost*: and sometimes it is evacuated quite out of the Body; and as *Rhasertels* us, it is oftentimes carried unto the Intestines, and there it exciteth a flux of the Belly, and excoriateth the said Intestines; and this flux continueth sometimes all the life after, and the strength by degrees and by little and little failing, (by reason of Feavers and pains) the sick persons after long wasting and consuming by Marasms, at length they die.

Chap. 5. The Indications and Cure.

The indications & Cure of the Gout. Since that the perfect Cure of preternatural affects doth chiefly consist in the taking away of the Causes, and that the Authors (as we told you before) differ among themselves as touching the Causes of the Gout, it is therefore no wonder, that there is so great a discord among them about the Cure, some propounding one way, and some another, for the Curing of this Disease. Which difference and variety of opinions, (as we have sometimes already told you) hath not been the least (but indeed the greatest) cause why so few of those troubled with the Gout have hitherto been cured thereof; each Physician here setting himself to oppose that as an enemy which he hath often to himself fancied so to be, and in the mean time altogether neglecting that which is indeed the true enemy. And this evidently appeareth from the *Consilia* or advisings of Physicians one with the other (which have likewise been in the behalf of persons of the greatest worth and quality) in the most of which (opinions being asked, and resolves sent from one to the other) the whole result of the business for the most part came to this, that the Cure was chiefly to be directed to the head, as the commanding Member; and unto the Joynts, as the recipient Member. And so the authority of *Fernelius* alone (a Physician otherwise of great learning and experience) hath drawn very many into the same error with him, and kept them from searching after the truth; and hath likewise caused that many sick of this grief have taken such Physick, and several sorts of Medicaments that were very unfit, and altogether improper for them. We therefore (leaving unto every man his Judgment and Opinion) insisting upon those Fundamentals which we have above propounded, will here briefly declare our Opinion as touching the way and Method of Curing the Disease we are now treating of.

Why so few have been cured of the Gout. Now the Cure so called in general consisteth in two things: the former whereof is, that the present Paroxysm (whether Pain, Swelling, Impediment of the motion, and all other things that are wont to be troublesom unto such as are afflicted with the Gout) be taken away. And the other is, that a course be taken to prevent the return of the Paroxysm being once removed.

And in the first place indeed, for the manner of Curing the Gout that is present, there are three things especially, which (in the Paroxysm) the Patient desireth a speedy removal of, *viz.* the Pain, Swelling, and the Impediment of his motion. And now seeing that all these three have their original from a preternatural Humor fallen into the joynt, the total removing of the Paroxysm consisteth in this, that the influx of the Humor be withstood, and that the Humor already fallen in be taken away. For that Humor being removed, there followeth both a cessation of the Pain, and a vanishing of the swelling, and the motion of the part again returneth. But yet nevertheless, in regard that the pain doth oftentimes so extremely excruciate and Torture the sick Person, that he cannot well bear it (until the Humor the Cause thereof be taken away) the pain is therefore sometimes first of all to be moderated, yea even before the Cause be wholly removed. And so then the whole Cure of the Gout afflicting the sick Person consisteth in the taking away of the Cause, and the mitigation of the pain.

As for the first of these, seeing that the flux taketh its beginning from the motion and boyling as it were of the blood and Humors in the Veins, that motion and boyling of the Humors is first of all to be stopt; and the Humors that with violence rush unto the part affected are not only to be turned another way, but they are also to be wholly evacuated, and emptied forth out of the Body; for unless this be done,

done, the pain will be but the more exasperated. And afterwards the humor that hath flown in is to be discolled and scattered. And because that pain is the thing that chiefly grieveth the sick Person, this is sometimes also to be mitigated even before the Cause be taken away.

And therefore if any Cause, either external (to wit, the distemper of the Ambient Air) or the thickness of the body shall have given the occasion, it is forthwith to be removed, yea and also to be corrected after a quite contrary manner.

Venesection.

And secondly, If Blood abound in the Body (which may be also so moved by the violent motion of the humor that it may as it were boyl, and by the pain be attracted unto the part affected, and so concur as a Joynt Cause of the Gout, and may possibly likewise augment the Malady) and that moreover a Feaver be threatened as neer at hand, or else if it shall accompany it; then in this case (if the Patients strength will bear it) Blood-letting is to be instituted, that so the afflux unto the part affected may be diminished, and that that fomenteth & addeth fuel unto the approaching Feaver may be withdrawn, and yet notwithstanding so that there be not too great a quantity of the Blood evacuated. But if there shall be no danger at all threatened by the abounding of the Blood, or that also a flegmatick humor aboundeth, Venesection is in this case rather hurtful than any waies useful and profitable, in regard that then by the evacuation of the Blood the Spirits may be dissipated and the Native heat wasted; whereupon the heat in the part affected may be so weakned, that it may not be able to overcome the humors in the part affected, and so easily to scatter them; and hence it is that the Patients are longer ere they can recover their strength and health: yea and sometimes also there are by this means hard knobs and knots generated in the Joynts. And if all or most part of the Joynts be affected, then the basilique Vein (either in the right or left Arm) is to be opened. But if one only Joynt be affected, then the opposite Vein is to be opened. As for example, if the Joynts in the right Arm be affected, the Vein in the left Arm is to be opened: and so on the contrary. If the right Foot be troubled with this grief, then the Vein of the right Arm is to be opened; if the left Foot, then the Vein in the Arm is to be opened on the same side. For this is more commodious, than to open the Vein in the Foot of the opposite side: for by that former Venesection the fluent humors are drawn back; whereas by this latter they are only derived unto some other part. And the like is to be done if the pain be in the Hip.

Venesection in the Arm (in the Sciatica pain) being premised for derivation, a Vein may afterwards very fitly be opened in the Ham, or neer unto the interior Ankle (or also the exterior) in the Vein there appearing, which (by reason of the great benefit it bringeth unto the sick Person, if it be then, and that in due time opened) they call the *Ischiadicke* or Sciatick Vein, which (and that very often) alone cureth this Affect. But yet for the most part it is opened in the pained Thigh; although that *Platerus* writeth, that upon the opening of a Vein also in the sound and unpained Thigh very great benefit hath followed thereupon, and that all the pain hath thereby been suddenly and unexpectedly taken away.

But in regard of the urgency of the Malady, and that the Flux cometh very speedily, therefore even forthwith (if there be occasion) Venesection is to be instituted, and as much of the Blood as is needful (if the strength of the Patient will bear it) to be taken forth at once opening of the Vein. But if the Patients strength will not bear nor allow of a more large evacuation of the Blood all at once; then at several times, and by intervals so much of the Blood is to be drawn forth as may answer unto the Bodies fullness thereof. Instead of this Venesection Cupping-glasses may also be applied, which are wont to be affixed (in the very first beginning of the Pains) unto the sound opposite part with Scarification. And so likewise Leeches applied in the accustomed places for the Hemorrhoids bring some kind of benefit unto the sick Person by their drawing forth the Blood.

Purgation.

These Revulsions by the Evacuation of the Blood being thus made, purging is then next of all to be appointed unto the Patient; touching which although there be some that think otherwise (as we shall afterwards further shew you in the 11. Question) yet for the most part it is very fitly and successfully administered. But it is instantly to be ordained (even in the very beginning of the pains, or if occasion be, when they are suspected as nigh

at hand) before such time as by the said pains, as also by restlessness and want of sleep; or by the augmentation of the Feaver the strength be too much impaired; neither need we here to expect any Concoction, or use any preparation before; which most of the Physicians of former Ages were wont to do, who first of all made use of Lenitives, and then Secondly, Preparatives (or Digestives as they call them) for some certain daies; and Lastly, of Purgers that draw the humors from the Joynts. For even then when the humors have already before been in their motion, and are become thin, and that Nature her self endeavoreth the separation of them, as burthensome to her, from the good Blood, (and that there is cause to fear lest that, as we said before, ere ever any such things as these can be done and finished the humors may rush unto the Joynts, and that by pain and want of rest the strength be too much dejected, and that a Feaver following thereupon forbid a Purgation) even then the Purgation is forthwith to be instituted. And the exhibition of one only Purge doth for the most part less hurt and offend the Stomack than those so often repeated digestive Potions, which resolve and weaken the Stomack, so that the Crudities being afterwards augmented, there is caused a greater afflux of humors unto the Joynts.

Altering Medicaments.

Alterers. Yet nevertheless, if the humors be over-hot and sharp, they may be attempered by Broths altered by Cichory, Endive, Sowthistle, Purslane, Sorrel, and Medicaments made out of these: neither are we to omit the administering of the Conserve of Roses with the species *Diatrion santalon*, it being of singular use in the altering of the humors. As,

Take Conserve of Roses three ounces, Spec. *Diatrion sant.* one dram, Red Coral one scruple, and with the Syrup of Pomegranates make an Electuary. Or,

Take Margarites prepared one dram, Red Coral prepared, and all the Sanders, of each one dram and half, Red Roses one dram, the Bone taken out of the Staggs beard one scruple, and make a Powder. Or else with Sugar dissolved in Rose Water make little Rolls.

But now as touching Purgation, we are to advise you in these two things especially. First, that a fit time be made choyce of (as we gave notice before) and that the Purgation be not too long deferred. For if already the whol humor be flown in unto the Joynts, it is easily called back. And therefore, that the humor which is now ready to flow into the Joynts may be turned unto the Belly and by it be evacuated presently in the very beginning of the Paroxysm (yea and also so soon as ever we do but suspect it to be nigh at hand) the Purgation is to be ordained, and administered; for by this means the humor that is now flowing, and that which was after to flow, is evacuated by convenient places, and hindred that it rush not to the part affected; and the encrease of the pain and swelling is hereby prevented; and so that which hath already flown in unto the part affected is easily dissolved. And experience it self testifieth that this kind of Cure hath profited very many. And so *Petrus Bayrus* writeth of himself, that he himself being by four men carried to the Close Stool, after that he had four times eased his Belly (having before taken his own *Caryocostin*. Electuary) he was freed from all his pains; and that he could then go without help from any other.

And then Secondly, It is to be considered, by what Medicaments the Purgation is to be instituted and begun. Some think that we ought to abstain from the stronger sort of Medicaments, and to make use only of those that are more mild and gentle (or of the stronger in the smallest quantity) because that a strong purge may draw store of humors from the more ignoble and external parts unto the more noble; and so it may sometimes happen that some of these sick Persons may by a vehement and strong Purge fall into burning Feavers, as also Feavers Malignant and Mortal. Which as we willingly grant, and think that the humors that were hot before are not by vehement Purgers to be more inflamed; and that the motion of Nature is not altogether to be disturbed: so also on the other hand we conceive that great care ought to be taken, that the humors be not only stirred and moved up and down in the Veins, and not wholly drawn forth, and sufficiently evacuated. Which when it happeneth, they afterwards rush with a greater violence unto the part affected, as unto the which they are withal attracted by the pain. And therefore in the beginning of the Paroxysm, or when it is nigh at hand, we ought to make choyce of Medicaments that are somewhat stronger than ordinary; and yet notwithstanding such as do no way offend the Stomack. For (as we said before) if we make use of those that are too gentle and weak in their operation, the humors are then only moved up and down in the Body, and nothing worth speaking of is evacuated; whereupon there is afterward a greater Conflux unto the part affected.

But

But now, that during the purgation there may be no Conflux unto the part affected, and that the Humor being moved by the Purgation may not rush unto the part affected, this we ought carefully to prevent; and it is done by placing the part affected in a higher place in the Bed, until the Purgation shall be fully finished; or (which is the more sure and certain way) by imposing a defensive Medicament (after the administering of the purge) upon the head of the part affected. As for example, if the pain be in the Hand, the defensive is to be placed upon the Shoulder; and this may be made and provided of the *Flowers of Roses, Pomegranate flowers, Roots of Bistort, Tormentill, the greater Consound, the Rinds of Pomegranates, Bole-Armenick, mingled with the white of an Egg, and Rose water, or Vinegar.* And that this Cataplasm being dried, and so made hard, may not excite Pains, and thereby further provoke the flux, a little of the *Countesses Unguent, or of the Oyl of Roses Omphacine,* is to be added thereto. Or else instead of the Cataplasm, a swathe that is long enough may be wet in posset (in which Oak-moss, Red Roses, or other Astringents even now mentioned have been boyled) and drawn over the upper part; as for instance, (in the Gout of the Feet) upon the part above the Knees. And those Defensives are to be continued so long as the Purgation lasteth, yea for the whole day, as we see occasion.

But now we cannot in general define, with what kind of Medicaments this purgation is to be performed, in regard of the great variety there is in Bodies. For although the Humor (the highest cause of the Gout) be wheyish, Salt, and Tartarous; yet nevertheless this very Humor is in divers Bodies constituted after a different manner; and hurrieth along with it other Humors also that abound in the Body. Yea and in one and the same Body the same Medicaments are not alwaies fit and proper, because that the state of the Body is not evermore one and the same. And therefore the Physitian ought to be present with the Patient, when he prescribeth such like Remedies.

Now for the Evacuating of Serous Humors, and Cholerick Ichores, such as these following ought to be provided, viz. *Syr. of Roses solutive, de Spina Cervina, (commonly called the Domestick Syrup) Manna, Mechoacan, Sene, the Seeds of wild Saffron,* and the compounds from any of these; as also *Electuar. Diacatholic. Triphera Persica, de Succo Rosarum.* And so likewise in the stronger kind of Medicaments, those are of special use that are made of *Hermodaëtils*; and among them the *Caryocostine Electuary of Bayrus*; of which we shal anon make further mention, when we come to speak of the Preservation from the Gout. Or,

Take *The Choycest Turbith, and Hermodaëtils, of each three drams, Diagridium one dram and half, Ginger and Mastick, of each a dram; Sugar six drams; make a Poulder hereof; the Dose whereof is one dram, or a dram and half, with flesh broth.*

Or, Else let the Patient make use of the Pills of *Rhases*, which (as he writeth in his 9. B. to Mansor. Chap. 90.) will presently make and enable those that keep their Beds to Rise, stir and walk up and down; and they are in this manner to be Compounded.

Take *Aloes one dram, Scammony half a half peny weight, red Roses a double quantity to the former, Hermodaët. half a dram.* Make pills thereof, and give them all at once, and yet not without regard unto the strength of the Patient.

But now, although the serous or wheyish Humor be the highest cause of the Gout; yet notwithstanding because that this Humor doth also violently carry along with it other vitious Humors in the Body (and especially when the pain cometh) the Physitian therefore ought to be present with the Patient, when he is to prescribe such various purging Medicaments for the present occasion of the sick Person.

Vomitories.

A Vomit is likewise very useful in such as are accustomed thereunto; and seeing that it may Evacuate the Humor by a shorter way, there is no such cause to fear the rushing of the Humors unto the part affected. A Vomit.

And yet notwithstanding we dare not here give such strong Vomitories that may evacuate the Humors out of the very Veins; but it will be sufficient if such be administered

ministred that do evacuate the first waies and the parts neer unto the Stomach. For if there be many vicious Humors residing about the Stomach, Spleen, and the hollow of the Liver, and in the places neer thereunto, it may very easily come to pass, that these Humors being stird up and down throughout the whole Body, they may both penetrate unto the Veins, and rush unto the part affected. And purges may be likewise appointed unto the sick person after his vomiting; yea and if one purgation will not serve the turn, it is again a Second time to be repeated. *Franciscus India* (in his 2 B. of the Gout, and the Third Chapt.) doth here wonderfully extol a Vomitory that he maketh of *Butchers Broom*, a sufficient quantity of the powder thereof, given with the *deffilled Water of unripe Oranges* a litle warm; which (as he writeth) can with special benefit unto the sick person Evacuate both the Choler and the Flegm, not only upwards; but downwards also.

Sudorificks, or Sweaters.

Sweaters.

The Body being sufficiently purged, we are to endeavour that sweat may be provoked, either of its own accord, or else by administering of Medicaments: For (as *Crato* writeth truly, in his 24. Conf.) if the sweat be at all detained within, and hindered from coming forth, (especially if the Patient hath been accustomed thereunto) it will not be long ere a fit of the Gout come: yea and without all doubt, the Paroxysm will be much augmented and provoked, if in it the sweat be detained, and if the remainders of the wheyish Humor in the Veins be not discussed and Scattered; and on the contrary, the Paroxysm will be the shorter, if the Serum or Whey be by sweat dispersed. But since that in the first invasion of the Gout there is as it were a certain kind of boyling of the Humors, and that for the most part there is likewise present a Feaver, in this regard hot sweaters (such as are *Treacle*, *Mithridate*, and the like) are here scarcely fit and convenient, because that by them the Humors may be the more inflamed. But yet *Harts-horn* (either crude, or prepared without any burning) may be very fitly exhibited, either alone, or with the Water of *Carduus Benedictus*. And so likewise *Diaphoretick Antimony* is very useful. But if the Constitution of the Body, and the disposition of the Humors will bear it, the Decoction of *Sassaparilla*, or *Sarsaparilla*, or *Chyna*, may be administered; which yet nevertheless we ought to temper with *Succory*, *Endive*, *Southistle*, and *Dandelion* or *Lions Tooth*. But yet all those things that are useful in the Paroxysms, for the discussing of the Humors either sensibly or insensibly, they have not all of them their place here in the Cure. And so likewise the Decoction of the greater Dock, or Burr (in regard that it cutteth, discusseth, moveth sweats and Urins) is very useful; and *Forrestus* relateth that *Vastellius*, a Pensioner at *Mechlin*, when he was forced to keep his Bed by reason of the pains of his Joynts (insomuch that he was not able to move or stir any one Member) he drank warm Beer in the which there had been boyled the Root of the greater Dock; which having drunk up, (when he could not be cured by any other remedies of the Physitians) he made a great deal of white Water, (his Urine being like Milk) and so was freed from all his pains. Or,

Sweaters
of what
kind they
must be.

Take *Sarsaparilla*, one ounce, *Sassafras Wood* half an ounce, the Root of the Clove Tree one ounce; *Citrine Saunders* two drams; Infuse all in three pints of Water, for twenty four hours, and afterward boyl the same; and give of this Decoction one draught in the morning, either alone, or else with *Harts horn*.

Topicks.

Topicks.

The Body being thus in a due manner evacuated, and the Antecedent cause (that would have augmented the Disease) being once taken away, we then come to the very moderating of the pain, and the taking away of the Containing Cause of the pain and swelling, and so unto the Topicks. But if Topicks shall presently be administered, before those Universal and General Remedies shall have been first made use of, the Patient shall receive from thence far more hurt then benefit. For either the matter which Nature endeavoureth to thrust forth to the Joynts is driven back unto the more inward parts (from whence very grievous Symptoms are excited:) or else it is impacted into the Joynts, and so the pain is exasperated: or else the part

part is effeminated and made weak, and loosened; and so the flux is increased. Which being not commonly taken notice of, and Topicks being oftentimes most unseasonably and without any caution at all administered, the sick persons do for the most part receive more hurt then good from them; and from hence it was that the common and received opinion had its first original, to wit, that the best course is, to administer nothing at all unto the pained Joynts. And the truth is, that it is far better to apply nothing at all (but to commit the whole business to Nature,) then to make use of such Medicaments as are altogether unfit and improper.

Now the Topicks that are applied, they respect either the pain only, or else with all the Cause of the pain, to wit, the Humor that now and formerly hath flown in, exciting both a pain and a swelling.

Mitigaters of Pain.

The Pain in this Disease for the most part is a most grievous Symptom, and which is most troublesome to the sick parties, and which they most of all Curse and Bann, (as *Lucian* hath it in the beginning almost of his *Tragopodagra*) and therefore also it is that they most of all desire the removal thereof. And indeed it is altogether necessary that the Physician should have regard thereunto, because that if it be too great, it causeth a restlessness, dejecteth the strength, and by attracting the Humors it augmenteth the Malady, and so deservedly draweth our care unto it, for its removal; (as *Galen* in the 12. of his *Method*, C. 1.) and thereupon it sheweth, and pointeth us unto the asswaging thereof by Anodynes. Now Anodynes or Mitigaters of pain have likewise this Good and benefit going along with them, to wit, that by loosning the parts they make that the Humor that before flowed only unto the interior parts about the Joynts, comes now also to flow and be diffused unto the Ambient and fleshy parts. And hence it is that the pains in the Gout, before the swelling of the part, are most Vehement and Intollerable; and that so soon as the part affected begins to swell, they are much Mitigated.

But now these Anodynes of what kind they are, we have told you elsewhere, (in our *Institutions*) to wit, such as mollifie and loosen the part affected, and yet do not discuss the very Cause it self. And here they may be provided of Goats Milk newly drawn out of their Dugs, as also white bread and Milk, together with the Yelks of Eggs, and a little Saffron; as likewise of the Leaves of Marsh-Mallows, Mallows, Colewort, or Cabbage, laid upon the place affected as hot as the Patient can well endure them; as also of Mallow Seeds, Seeds of Marsh-Mallows, Quinces, Fleabane, (and especially the Mucillages of them) Cassia newly drawn out of the Pipe with the Decoction or Water of Nightshade; which (as *Avicen* tells us) is the best Remedy that can be; unto which (if there flow any hot Humors thereunto) we may add some of the Oyl of Roses, or Rose water; but if the flowing Humors be cold, then we are to add thereto the Oyl of Camomil: and instead of Cassia out of the Pipe, we may likewise make use of the Rob of the Elder Tree; of white bread and Wine; and indeed if the Humor be more hot, red Wine; but if cold, or betwixt both, then white Wine with the powder of Camomile flowers and Oyl of Roses; of Cheese new made of sheeps Milk, and imposed upon the pained part, and often changed; of fresh-made Ox or Cow dung in the first beginning of the Spring, as also the Water that is distilled out of it. A most useful Remedy also is the Mucillage of Fleabane Seed extracted with the Water of Roses or Nightshade; unto which sometimes a little Vinegar may be added; and this Medicament is by *Serapion* and others very much commended.

In the very first beginning of the Disease, *Solenander* taketh the thick stalks of Hemlock, and fills them with Salt, and then stoppeth them with Clay or Paste, and puts them in a moist place that the Salt may dissolve; which liquor he keeps in a glass, and with Clothes applieth it unto the pained part.

And he oftentimes also made use of this Cataplasme:

Take Mallows, the whole Herb, Root and all, cut it into very small pieces; and boyl it in equal parts of Wine and Vinegar, in a new Earthen Vessel, until a third part be wasted away; and then mingle therewith the thicker Bran of Rye, as much as will suffice for the making of a Cataplasme, and apply this hot unto the grieved part.

Ferrestus

Forrestus relateth, that he knew one that added hereunto a little Barly flower, and that of the Water Lentile, boyled in Milk with Camomile flowers; and so reducing them into the form of a Cataplasme, he put them upon the part affected with miraculous success, as one could judg no other of it. And here also very useful is the Yelk of an Egg reduced into the form of a Liniment with the Oyl of Violets; and so is also the Water of the Sperm or seed of Frogs, which perhaps have in them some kind of Narcotick quality. *Adrianus Spigelius* writes, that among the *Moravians* there is in use a very notable Remedy, and noble experiment (for the speedy curing of the Gout-pains) to wit, the Water of Meadow Sweet, distilled with its Roots and Flowers; and this water is likewise in frequent use among the *Silesians*. And it is also very convenient to foment the part affected with the Decoction of *Parietary* or *Pellitory of the Wall*.

And very many there be likewise that make use of Oyls and Fats. But here we are to give you this Caution (and good cause there is also for it) that these Oyls and Fats are warily and carefully to be made use of. For in regard that the Gout hath often some kind of alliance with the *Erysipelas* as to the cause thereof; and that it is a thing generally well known, how that all fat things that stop up the pores in the *Erysipelas* do more hurt than benefit; the very same seemeth likewise to be feared in the Gout, lest that the Pores being stopp'd up by these fats, the humor being detained within, the pain may be augmented; and this even very experience testifieth. And it was related unto me by a certain honest Neighbor of mine, that he himself in the asswaging of the Gout pains in his own Body, found nothing to be better than Cheese of Sheeps Milk new and fresh made, and laid on, but often renewed. For no sooner did the Cheese begin (being made hot by the heat of the part) to become fat, and to drop forth butter as it were, but (as he said) his pain was thereupon very much increased.

Take the Pith of wheaten Bread half a pound, and boyl it in as much new Milk as will serve to make a Cataplasme: and then add of the mucilage of Marshmallow seeds two ounces, the meal of Linseeds and Fenugreek of each two drams, Powder of Camomil flowers and Melilote, of each one ounce, Saffron one dram, Oyl of Roses and Camomil, of each half an ounce, and mingle them wel together. Or,

Take Milk newly come from the Cow one ounce and half, Crumbs of white Bread five drams, Barly meal one ounce and half, the common Hermodactyles six drams, Saffron one dram, Oyl of Camomile as much as will suffice, and make hereof a Cataplasme. Or,

Take white Bread six ounces, Milk as much as will suffice, and mingle them wel at the fire; and then add the Yelks of two Eggs, Electuary of Roses two ounces, Saffron one scruple, and mingle them. Or,

Take the Meal of Barly, of Beans, of the bitter Vetch Orobus, of each one ounce, of Linseed six drams, the Powder of Camomile flowers three drams, of Melilote two drams, of Saffron one scruple; boyl them in a sufficient quantity of the Water of Camomile flowers; then add the Yelks of two Eggs, Oyl of Camomile and Roses of each one ounce, and mingle them. Or,

Take the soft Crumbs of Wheaten Bread one ounce, Powder of the Mullein flowers two ounces; boyl them in Milk; and then add of the flower of Cassia one ounce, and mingle them. Or,

Take of Linseeds and Fenugreek seeds equal parts of each: let the Mucilage be drawn out of them with Rose-water; and then add the yelks of two Eggs, and a little Vinegar; and then sprinkle in Bean Meal, and make a Cataplasme. Or,

Take Meal of Barly, of Linseed, of Fenugreek, of Beans, Powder of Camomile flowers, of each half an ounce; Marsh-mallow Roots one ounce, Oyl of Roses and Camomile, of each one ounce and half; Yelks of three Eggs, the Rob of Wine one ounce, mingle them and make a Cataplasme. Or,

Take the flowers of Mulleyn as much as you think fit; infuse them in a sufficient quantity of Red Wine for two months, and then let them be distilled; let the place be fomented with the distilled water, and then after anoynted with the Oyl or Liquor of Mulleyn flowers that is in the Summer time collected by the Sun-beams in a Glass close stopped. Or,

Take the yong and tender buds of the Hazel Tree; press the Oyl out of them after the same manner as it is wont to be made of Linseed. The Body of it that remaineth after the pressing forth of the Oyl, let it be burnt; and out of the Ashes let there be the Salt drawn forth with pure spring water, and let this be mingled with the aforesaid Oyl. The Oyl when it is mingled with the Salt, let it be clarified by pouring and passing it through a Box of

of Wood (as Painters are wont to clarify the Oyl of Linseed for their own use) and so it becomes a very excellent Medicament for the mitigating of pains.

But now these very Anodynes themselves may be somewhat varied according to the quality of the humor; and in a humor that is more hot there may be added some certain things that are cooling, as *Roses*, and the *Water* that cometh from them, *Plantane Water*, and the like. But in a cold Cause the *Flowers* of *Camomile* and *Melilote*, *Wormwood*, *Linseed* and *Fennugreek* may be added.

Narcoticks.

If Anodynes be not sufficient for the aforesaid purpose, then Narcoticks are to be made use of; which in regard that they bring a certain kind of numbness upon the part, they do not only forthwith assuage the pain; but they likewise (by their heat which they obtain) do also withal resolve the humors, and so with benefit and safety (and without any danger at all as it is thought) they may be made use of, as *Platerus* writeth in the 2. B. of his *Practice*: and therefore he (as likewise many others have done) much commendeth the Leaves of *Henbane*, and *Mandrake*, and *Poppy*, if while they be new they be first bruised or boyled, and so laid upon the part: and their Oyls are also very useful; and so is the Juyce also that is pressed forth of them and used for a fomentation; as likewise the Root of *Mandrake* and *Henbane* seed applied together with other things in the form of a Cataplasm. The new and fresh Leaves likewise of *Tobacco*, bruised and laid upon the pained part do assuage the pain. And the same *Platerus* (as likewise other Authors) have here recourse unto *Opium* also, and they mingle it together with other Anodynes; and unto two ounces of these they add a dram of *Opium*. And he writeth also, that if it be dissolved in the infusion of the Spirit of Wine alone, or the infusion of *Saffron* (four ounces of the yellowest of it) and one scruple of *Camphyre* with a dram of *Opium*, and the part where the pain is be well washed or bathed with the said Liquor, it is a most efficacious and soveraign Remedy. And so likewise the Opiate Antidotes, as *Treacle*, *Mithridate*, *Philonium*, may be added while they are new, especially in case the quantity of the *Opium* may be augmented.

And yet notwithstanding we are not to continue long in the use of these Opiates, in regard that they are enemies unto the native heat, and Nerves.

And yet nevertheless the same *Platerus* tells us (in the first B. of his *Practice*, Chap. 5. of the hurting of the Touch) that he could never find that the Skin could be made stupid and senseless of pain by any external Narcotick applied thereunto, albeit (that so he might know somewhat of a certainty) he had applied a Mass of *Opium* when he had first softened it, unto the part pained with the Gout.

But the truth indeed is, that Narcoticks when they are administered do very easily assuage the pain; but then withal it being so that they hinder the motion of the humors unto the external parts, they may also very easily cause some inconvenience, and make the pain longer, since that the pain is wont to return again in a short time after. As for example:

Take *Barly Meal* four ounces, the Crumb of *Wheaten Bread* three ounces, *Milk* as much as will suffice: boyl them to the consistence of a Cataplasm; and then add of the Oyl of *Roses* one ounce, the Yelks of three Eggs, *Opium* one scruple, and mingle them.

Or, Take the soft pith of white Bread as much as wil suffice; pour thereon of Cream of *Tartar* a sufficient quantity, and then add *Saffron* one dram, *Frankincense* half a dram, Powder of *Earth-worms* two drams, the Yelks of four Eggs, *Henbane* and white *Poppy* seed, of each three drams; let them boyl in a double Vessel for half an hour, and make a Cataplasm. Or,

Take Leaves of *Henbane* three handfuls, the Berries of *Nightshade* one ounce; let them be boyled til they be soft, and then bruised to a Mash; then strew upon it one ounce and half of *Barly Meal*, and a little Oyl of *Roses*, and so make a Cataplasm. Or,

Take *Barly Meal*, the soft Crumb of white Bread, of each half a handful; Leaves of *Henbane*, *Mallows*, *Violets*, of each one handful; Flowers of *Camomile*, Rinds of white *Poppy*, of each half a handful; Oyl of *Earth-worms*, and *Poppy*, of each one ounce, and make a Cataplasm. If you think fit you may also add of *Opium* and *Saffron*, of each one dram.

Or, Take Roots of *Mandrake*, and Leaves of *Henbane* of each as much as you think wil suffice; boyl and bruise them all to a Mash, and then add of *Barly Meal*, and *Bean meal*, with Oyl of *Roses*, a sufficient quantity of each, and make a Cataplasm. Or,

Take *Crude Vitriol* two pound, *Spirit of Wine* three pints, the *Water of the Elder Tree* one Quart. Mingle them all well together in a Glass Vessel well Luted, and then putting to the Alembick, and the Receiver (in which there may be put the *Seeds of Henbane* bruised two ounces, the flowers of *Mullein*, *Elder*, and *Camomile*, of each two handfuls;) let there be a distillation, by degrees, until the Glass be Fire hot. After the distillation, let the spirit with the flegm be separated from the Seeds and flowers; and so let it be kept in a Glass for use. Or,

Take *Leaves of Henbane* one handful, *Nightshade*, *Sengreen*, the *Heads of Garden Poppyes*, of each half a handful, *Mandrake Roots* one ounce, *Flowers of Camomile* and *Mulleyn*, of each one pugil, *Seed of Fleabane* one ounce and half, of *Henbane* one dram: Let them be boyled in Milk for a Fomentation; then let the Remainders be bruised to a mash; and then add of the *Meal of Lin-seed* one ounce, *Barley Meal* and *Oyl of Roses*, of each two ounces; and make a Cataplasme.

And there are some also that refer hither the washing of the grieved part with cold Water; and indeed this they do by the authority of *Hippocrates*, who in his 5 *Seet. 25. Aphorism*, writeth in this manner: *The Gout pains of the Joynts, as also Convulsions, and many more of these kind of pains are lessened and taken away by the large affusion of cold Water, and plentiful pouring of it upon the part that is in pain: for a Moderate stupifying and benumbing removeth the pain.* And so likewise *Donat. Antonius Ferrus* (in his 2 *Traet of the Gout*, Chap. 9.) writeth that he had oftentimes had experience of this Remedy; and that when all other Remedies were to no purpose, he betook himself unto the pouring of cold Water upon the part, as unto his last shift, and that the pain was forthwith asswaged thereby. And the very truth is, that it cannot indeed be at all denied, that cold Water being poured forth upon the pained part doth not only drive back, but likewise produce a kind of stupidity and benumbedness, and thereby assuage the pain; but it is to be feared lest that by this means the innate heat of the part be destroyed, and so a weakness brought upon the part, by reason of which the Malady may afterward be rendered more grievous, and moreover the Humor may be impacted into the part, and there condensed and thickened; or else haply by this violent Repulse the Humors may be made to rush unto the more inward parts.

Repellers, or Medicaments that drive back.

Repellers.

But now as for Topicks, (that are directed unto the Cause) and in the first place, touching Repelling Medicaments we say, that although they are by some commended; yet alone they have here scarcely any place at all. For seeing that Nature her self hath ordained this Motion, and that she endeavoureth to drive forth the vicious Humors from the more internal unto the external parts that are less noble, if this motion be hindered, and the Humors driven back again unto the internal and more noble and principal parts, this cannot be done without the extream hazard of the life; and hereupon there will arise the worst and most dangerous Symptoms, that will not cease, unless Nature again expel forth the vicious Humor unto some other Joynt.

And moreover, when the pain is a little mitigated, in regard that the matter is diffused unto the external parts that are about the Joynt, if by the Repellers it be driven back unto the internal parts, the pain happeneth then to be increased; and hence it is also, that very many cannot so much as endure the cold Air from without (neither yet sometimes the external Air although it be not so very cold) but that there is a Necessity of covering the affected Member, if they expect to have their pain Mitigated. And furthermore if the matter hath already flown out of the part into the Joynt, by the use of Medicaments that drive back and Cool it is made more thick and impacted into the part, and so the Malady rendered more difficult to be cured. But yet nevertheless if by the sudden and overgreat afflux of the humors (especially such as are more hot) the pain be much increased even in the very first beginning of the fit, (in so much that it seemeth to call for all the Care, and to require that all the means that are used may be for the removal thereof, and that therefore we have a mind to moderate it, and somewhat to drive it back) we may then indeed make use of Repellers, but not of them alone and by themselves, but mingled with Anodynes, Venesection and Purgation having gone before. Like as on the Contrary, we are

are not in the beginning to make use of those Medicaments that are over loosening, since that they help forward the afflux of the Humors; but we ought in the first place to make use of those Medicaments that do somewhat stop and stay the afflux of the Humors. And therefore we may then lawfully add Lettice, Sengreen, Purslaine, Violets, Plantane, Roses, (and such Compounds as are made out of them) as also what Vinegar we think fit. As,

Take Barly Meal three ounces; boyl it in Oxycrate; then add the Yelks of two Eggs, Saffron one scruple, and mingle them. Or,

Take Mucillage of the Seed of Fleabane, extracted with Rose Water, two ounces; Mucillage of Marsh-Mallow Seeds one ounce, Barly Meal as much as will suffice, the yelk of one Egge, and so make a Cataplasme. Or,

Take The water of the Sperm of Frogs four ounces, Water of Nightshade, of the flowers of Elder, and of Plantane, of each two ounces; Camphire half a scruple: and mingle them well together.

If you think fit, the Mucillage of the Seed of Fleabane, and of Quinces, of each one ounce, may be added. Or,

Take Juice of Henbane, Sengreen, Lettice, of each two ounces, Barly Meal one ounce, the Yelk of one Egg, and Oyl of Roses two ounces. Mingle them well together. Or,

Take Red Roses one handful, the Meal of Fenugreek Seed, Beans, and Barly, of each one ounce, Red Sanders one dram and half, Camomile flowers one pugil; when they are boyled and thoroughly bruised, you are to add the Yelks of two Eggs, Vinegar four ounces, Oyl of Roses as much as will suffice: and make a Cataplasme. Or,

Take Water of Night-shade, of Plantane, of the Sperm of Frogs, of each two ounces, Oyl of Roses and Camomile, of each one ounce, Cows Milk three ounces, the Meal of Beans, Marsh-Mallows, and Barly, of each one ounce, or as much as will suffice, Saffron one scruple, the yelks of two Eggs, Smallage two scruples; Make a Cataplasme.

Some there are that steep Harts-born burnt and prepared in the Water of Mulleyn flowers; or else they boyl it in the same Water; and in the streyning they wet and soak Linen Clothes, and these they lay upon the part that is pained. Or,

Take Mulleyn new and fresh gathered six pound, Wine one Quart: Let them be Macerated for three whole daies, and then afterwards let them be destilled. Or,

Take The Flowers of Mulleyn, and fill a Glasse bottle full of them, and then stopping the mouth thereof very close, set it in the Sun: for so they dissolve as it were into a liquor: wherein you are to wet a Linen Cloath, and lay it upon the part affected, for the asswaging of the pain.

If you judge it fitter to make use of Oyls; Then,

Take Frogs five of them in Number, Earth-worms washed in Wine three ounces; boyl them in the Oyl of Roses, and strain them.

Discussing Medicaments.

But now when the force and violence of the fluxion is once past and gone, and the part become swoln, then those things are withall to be mingled which do call forth the Humor, and gently discuss the same and so take away some part of the Cause. But now here Physicians are wont (for the most part of them) to be very long and Tedious in reckoning up, and distinguishing the several Medicaments; which of them are fit and proper in a hot Cause; and which of them, when the Cause is cold; yea and which of them are most convenient for all kind of Humors. But although we deny not but that we are in some kind of manner to have respect unto the Condition of the Humor that floweth in unto the Joynts; yet nevertheless our chief and main Care ought to be, that the serous and sharp, wheyish Humor (which is the highest, and most principal Cause of the pain,) may be called forth of the more deep and close parts in the Joynts unto the external parts, and that they be insensibly discussed; and yet that this may the more conveniently be so done, we may likewise (as we said but now) have some regard unto those Humors that the aforesaid serous and sharp Humor forcibly draweth along with it, and which by Reason of the pain are together attracted to the part that is pained, and which are very commonly taken for the highest and most immediate Cause of the Gout. Yea and

moreover that very ferous Humor it self (the prime and principal Cause of this Evil) is in some more, and in others less hot. And therefore if the flowing Humor be more hot, then the discussing Medicaments ought to be so ordered, that they may indeed gently disperse the Humor; but yet so that they give no occasion at all for any new afflux. And such a like hot Humor, in regard that it is withall moveable and thin, is easily discussed; neither needeth it any stronger Medicaments. But if the Humor be less hot, or somewhat cold, then we may very safely administer Medicaments that are more hot. Neither will there be any Cause to fear that then a new flux may easily be excited; and therefore for the dispersing of such a like Humor there are necessarily required such Medicaments as are more hot then ordinary.

But now with what Medicaments that wheyish, and (as it is so called by the Chymists) Tartarous Humore is to be drawn forth and discussed, we are here (and that for very good Reason) diligently to make inquiry. For we have elsewhere told you (viz. in our Tract of *Chymic. Consil. & Diff. Chap. 15.*) that the Medicaments ought in their own kind to be like unto the Cause. For there is not any thing that suffereth from every thing; neither is there any thing that may be united unto every thing. Gum Arabick, and Tragacanth, and the Gum of Cherry Trees are dissolved by Water, because of the neer alliance and agreement in their Natures; but so is not Sulphur, and other things of a Sulphurous Nature, and those things that are Oyly. Sulphur is dissolved by Oyl, but not by *Aqua Fortis*, although the said Water is able to dissolve silver, and other Metals. The hands when they are all foul with Pitch or Turpentine are not to be made clean with Water, but with Oyl, or some thing else that is fat. In burnings we use not to administer cold Water; but Linseed Oyl, Vernish, and the like (that may draw forth that fire and burning) are to be applied. And so in the *Erysipelas* (or otherwise called *Rosa*) we ought not to impose those things that are fat, and Oyly, but ley tempered with Oyl; and Sope that is dissolved in Elder Water, and the Like; which do not at all shut the pores, but yet nevertheless they draw forth and discuss that subtile and hot Humor. And the very same is the case in the Gout; and since that it hath its Original, not from a Watery Humor, neither yet also from that which is Oyly or Sulphurous (as the Chymists speak) but from a Humor that is sharp and Salt, for the drawing forth and dissipating of this Humor, those things that contain in them a volatile and fitting Salt are rather to be administered, then those things that are fat and Oyly. And experience hath already taught many, that the Gout pains are increased by such things as are fat. And hence it is that the Chymists do so much commend (and not without cause) *Salt Armoniack*, oftentimes sublimated, dissolved in Wine, or some other convenient liquor, and so imposed upon the pained part. Others commend the Salt of Urine, in like manner dissolved in Wine, or some other liquor. And whereas *Adrian Spigelius* writeth that he saw when a Mans Urine (being kept till it was Stale) was laid upon the part affected (the pains as yet abiding, and continuing even in their height) and that it was wonderfully beneficial in giving ease; and how much rather then must the Salt of Urine perform this? Yea and there are some that use likewise other Salts to evacuate the aforesaid Humor. And I my self know also one that was wont to administer the spirit of Salt tempered with other liquors. And very fitly may it be tempered with the *Water of Meadowsweet*; for being then with a Feather laid upon the part in pain, it extracteth the Humor in such a manner, as that it may even seem to exhale in the likeness of a Vapor. Yea some there are that commend also those things that are wont to be made use of for the causing of redness in any part, and the raising of blisters when there is occasion; and these they mingle with *Anodynes*. Neither are these things the inventions of the latter Physicians, and the Modern Chymists; but that plants abounding with a volatile and sharp Salt were heretofore in use likewise with the Ancients; for the curing of the Gout, we are taught even by that one plant which we call *Lepidium* or *Sciatica Cresses*; whose Roots (as they write) being bruised, and mingled with old Grease, are (with singular benefit) applied unto those that are troubled with these pains of the Gout; as it appeareth out of *Dioscorides*, and *Damocrates* (whose verses upon this subject we may read in *Galen* his 10. B. of the Composition of Medicaments according to the place) and *Aetius*, Tet. ab. 3. Ser. 4. Ch. 2. and others. And as touching Mustard Seed, *Alexand. Tralleanus* writeth,

writeth, That he knew a certain person who by the use only of the said Mustard seed mingled with dried Figs (in extraordinary great pains arising from a cold Humor) was freed from the said pain of the Gout. Some commend the wild Radish thoroughly bruised; and I my self have seen that it hath done good to many. If we fear its Acrimony, and that from thence some heat may be excited, we may then first boyl it a little.

The Liquor of Snails is likewise very much extolled by some: as,

Take Snails taken forth of their Shells, in number twenty five: the berries of Danewort or Dwarf-Elder, and Salt, of each as much as will suffice. These being put into the Alembick in a clean Vessel with holes through the bottom thereof, let there be a Vessel put under it that may receive the Liquor as it distilleth; in the which you are to wet cloaths, and apply them unto the part affected.

This Suffumigation is likewise much commended.

Take Lign. Aloes, yellow Amber, Frankincense, Gum Juniper, Henbane seed, Styrax Calamite, Gum Tacamahaca, of each one dram; Pouder them grossly, and cast the pouder upon live coals of fire; and so for half an hour let the part affected receive the smoak hereof. Quercetan (in the seventh Chapter of his Pharmacop. restit.) hath four Waters, al good against the Gout. The first is this:

Take Water of the Sperm of Frogs, of white Mullein, and Sallow, of each a quart and half a pint: the Urine of a Boy that drinketh Wine, three pints: Treacle new and fresh two drams and half: Vitriol, Salt dissolved, and Allum, of each four ounces: Let them be distilled (till they be dry) upon the Embers: then add Salt of Vitriol one ounce and half: Camphire and Saffron, of each two drams, and mingle them. Let Linen cloaths be thoroughly wet in this Water, and applied unto the grieved part, and be very often renewed.

The Second Water is this:

Take Salt, Urine of a Child, of each as much as you think fit, and then distil them.

The third is this,

Take Leaves and Flowers of green Elder, of each one pound: let them be well bruised and macerated in a sufficient quantity of Wine (for three daies together) in Balneo, and afterward let them be distilled.

The fourth Water is this:

Take Spirit of Wine rectified one quart; the purest Honey one pound: Let them be distilled in Balneo; and let two Liquors be gathered from hence severally and apart, to wit, One watery, and the other Sulphureous. Add unto the remainders, of whol Saffron one ounce and half; Venice Turpentine two ounces; Tartar calcined to a whiteness half a pound; Salt one ounce; the flegm of Vitriol four ounces; Lye made of the tender shoots of the Vine two pints: Let them be macerated for twenty four hours, and then distilled till they be dry. Unto the feces that remain add the first Water, and let them be distilled. And at length mingle together all the Liquors, and distil them in a Balneum where they may evaporate.

Andreas Libavius (in the first part of his Apocalyps. Hermet. Cap. 8.) preferreth before all others that Water in which Brasse and Iron have been extinguished, and afterwards Mercurius vitæ hath therein been macerated. Or,

Take Venice Soap one ounce and half; Spirit of Wine, Water of Elder Flowers, of each two ounces, and mingle them. Or,

Take River Crevishes eight in number; Juniper grains one handful; Myrrh and Frankincense, of each one ounce; the best Wine one pint, let them be distilled. Or,

Take Mastick, Frankincense, Myrrh, Ammoniacum, and Bdellium, of each two ounces; Vitriol one pound; Honey a quart, Tartar an ounce and half; Spirit of Wine the best, four pints: let them be distilled according to art.

Solenander (in his 24. Consil. Sect. 5.) writeth, That he knew an old man that was much troubled with the Gout, who made for himself a Medicine in this manner. When there was a swelling, and a real pain, and the place red, he took Salt, Cinders, the Urine of a Child, and Vinegar; in these (well mingled together, and stirred up and down) he thoroughly moistened a white woollen cloth, and then squeezing it he applied it now and then unto the part that was pained. And when he had now by this means in great part asswaged the pain, and the disease declining, he boyled live Sulphur, and the pouder of white Hellebore in the Oyl of Linseed, and with it he anointed the places affected. And the same Solenander writeth also that this following was known to benefit many that made trial thereof. There groweth unto the Roots of the Oak (in the Autumn for the most part) a certain kind

kind of Mushrom that is red and tender, and proportionably big enough, according to the growth of the Tree, which he therefore calleth *Hypodrion* (the same no doubt that we have made mention of above in our 3. B. of Practice, Part. 2. Sect. 2. Chap. 7. touching the *Dysentery*;) this when he hath cut it into many smal thin slices, with Salt finely powdered he puts it into an Earthen pot; so sprinkling the aforesaid Salt that every laying of the several pieces may receive some thereof betwixt each other: he then puts them deep in the Earth for certain daies; and as for the brine which at length he findeth melted in the pot, he gathereth it all together, and this he keepeth to anoint the joynts when they are pained. But because that it vehemently drieth and discusseth, and wonderfully strengtheneth the part that is made loose by the Humor, he tels us therefore, that it is best to use it in the very first beginning of the pain, and before it hath gotten unto any height; or else in the end and declining of the Paroxysm, to consume the matter, and to add strength and firmness unto the part; and more especially if there be now and then interposed a fomentation and washing of the parts with the Decoction of *Mulleyn*, *Wormwood*, *Camomile*, *Bears-ears* or *French Cowslips*, *Sage*, *Ground-pine* or *Herb Ivy*, *Mugwort*, *Rosemary*, *Melilot*, and others of this kind, that have a power to cut, cleanse, discuss, meanly to dry, and strengthen.

And this Plaister is likewise very much commended.

Take *Gum Caranna* one ounce and half, *Gum Tacamahaca* six drams, the *Oxycroccum Emplaster*, nine ounces, *White Wax* five drams, *Powder of the greater Consound* two drams. With the Oyl of *Camomile* make an Emplaster according to Art; which being applied unto the pained part doth greatly draw forth the matter, and ease the pain.

And of such Kind of Medicaments as these there are many more in great abundance to be found in *Platerus* his second Book of Practice, and elsewhere in others.

And yet notwithstanding I think it not amiss, here to give you notice of this, that in the applying of all manner of Topicks we are diligently to heed the signs of those that benefit, and those that hurt and offend. For albeit the highest Cause of the Gout be a wheyish, salt, and tartarous humor (or call it by what name soever you please) yet nevertheless it is not for nothing that the Chymists give us notice (as we shal further shew you below in the sixth Question) that there are in the Earth and Plants divers kinds of Salts; or as *Platerus* speaketh, that the humor the Cause of the Gout is mingled with the *Ichores* of the excrementitious humors, which render the same more vehement and violent. And hence it is, that not only in divers and several Persons, but likewise in one and the same Person, according to his several ages, the nature of the pain is different, and not evermore one and the same.

And then lastly, for the discussing of the Reliques and Remainders there may be made fomentations of *Mugwort*, *Organy*, *Wormwood*, *Betony*, *Calamint*, *Flowers of Arabian Stachas*, *Lavender*, *Camomile*, *Melilote*, boyled in Wine and Water, which withal strengthen the part. But here *Crato* doth rightly advise us (in his *Consil.* 240) that we wet the Feet as little as may be, but that the vapor be only received by the Feet. And indeed such like fomentations are most convenient. And yet notwithstanding if there be a few more Plants boyled in the Water, and a little salt added; or else if a *Lixivium*, or Ley, be poured thereunto, there is no discommodity to be expected from the humectation; or if we do at all fear any hurt, lest that the waterish humidity should after the bath be left in the part affected, the following Trochisks may be cast upon the Coals of Fire, and the smoke received by the part affected:

Take *Gum Juniper*, and *Frankincense*, of each two drams; *Ladanium* and *Benjoin*, of each one ounce; *Cinnamom*, *Gloves*, and *Nutmeg*, of each half a dram; make them into a Powder; and incorporate them with *Gum Tragacanth*; and then make Trochisks thereof.

There is likewise very much commended a Bath of Juniper Wood, as also of the Decoction of a whol Fox, adding thereto Frogs and Earth-worms, and the Herbs before required.

Or else let the Feet be anoynted with some convenient Liniment or Unguent. *Galen* (in his 2. B. of simple Medic. Chap. 18.) as likewise many other Authors, do much commend the Chafing and Rubbing of salted Oyl into the part affected. For in all those (saith *Aetius tetrab.* 3. serm. 4. Cap. 21.) that are chafed in this manner, the Natural innate heat is augmented, that which is preternatural is dispersed, the Excrements are consumed, and the affected Members are rendred more strong, so that they are no further obnoxious and subject unto pains; especially, if from day to day all their whol life long they be diligent in the use

use of this Remedy every morning and evening. Touching which *Philagrius* very confidently (and without doubt Hyperbolically) is bold to pronounce (as *Aetius* writeth in the place alleadged) that even this one Remedy alone is sufficient for them that either most of all transgress in matter of Dyet, or such as are immoderately cooled, or sick with over hard labor, or such as have been excessive in the use of Venery, or such (lastly) as have run into any other error and excess. But now because that the Oyl and Salt are not easily mingled, the Salt is first of all to be moistened in hot Wine, and afterward in a Mortar to be diligently mingled with the Oyl; and alwaies before this Liniment be put unto use, the Salt is throughly to be mingled with the Oyl. Neither is it sufficient only to anoynt, but the Joynts are also to be wel rubbed, that so the force and virtue of the Medicament may the better penetrate.

Take *Castoreum* and *Frankincense* of each one dram and half, Marrow of a Hart, the fat of a Goose, of each three drams: Oyl of Mastich and Mints, of each two ounces and half: *Bdellium* and *Galbanum* dissolved in Vinegar, of each half an ounce: the meal of Linseed, and Fenugreek, of each three drams and half: Wax as much as will suffice, and make a Cataplasme.

The Remedy of *Flavius Clemens* (by the use of which, as it is reported, men that have been destroyed in their whol body by the Gout *Podagra* and *Chiragra* have been so well recovered that they have walked without any hurt or hinderance) is described by *Galen* in his 7. B. of the *Composit. of Medicam.* according to their kind, Chap. 12. (where he hath also other Receipts of this Nature) and so likewise in his 10. B. of the *Composit. of Medicaments* according to the place, Chap. 2. Or,

Take Gum of the Pine Tree one ounce, black Pitch two ounces, Wax one ounce and half: the fat of an old Cock two ounces, powder of *Hermadaetys*, and live Sulphur, of each three ounces: Let there be an Emplaster made thereof, and renewed the third day.

These Remedies immediately following are prescribed by *Henricus Stapedius* (in *Consil. Scholtzii*, *Consil.* 238.)

Take Juniper berries, and Marsh-mallows, of each two ounces: the Leaves of Laurel, Myrtle, Sage, Betony, Cassidony, or French Lavender, Organy, Calamint, Marjoram, and Rosemary, of each of these half a handful: Linseed and Fenugreek, of each two ounces: Make a Decoction in the Lye of the tender shoots of the Vine, adding thereto of common Salt one pound.

Afterward let them be anointed with the following Oyl.

Take Roots of Pellitory, Nutmeg, and Cloves bruised, of each two drams; Flowers of Sage, Hyssop, Rosemary, Arabian Lavender or Cassidony, and Spicknard, of each one dram and half; the Root of Birthwort, and *Hermadaetys*, of each one ounce: pour in hereunto of the Spirit of Wine one pint, or as much as wil suffice; let them be macerated for one whol day; and afterwards add of the best Turpentine one pound and half; and so distil them in a glass Alembick.

Alexander Trallianus and others commend this; and they assure us that by it not only such as have had the Gout from the flowing of a flegmatick Humor, but that likewise many that have had the pains of the Gout from the flux of a Coleric humor, have recovered their health and strength again.

Take Time, Organy, Savory, and Calamint, of each as much as you think fit; and boyl them in the sharpest Vinegar; and with the hot Decoction often wash and foment the parts affected.

For the Knobs or Knots.

If the matter be now grown into the wonted hard Knobs, it is indeed a most difficult business to dissolve them; but if they be not already become old and inveterate, there may be yet some hopes left of curing them. Now for the discussing of these knobs and knots we are not only to administer External and Topick Remedies, but likewise Internal Remedies. The Internal Remedies are those Antidotes above mentioned, amongst which the Antidote of *Trallianus* (made of Centaury) is more especially useful. And the same *Trallianus* writeth likewise, That a certain person troubled with the Gout, when the knots began first to appear, by the drinking of the Decoction of Groundpine or Herb Ivy, he prevented the further generating of them. The External and Topick Remedies (useful for the dissolving of the Knobs) are *Ammoniacum* dissolved in Vinegar. Or,

Take the simple Diachylon Emplaster one ounce; *Ammoniacum*, *Galbanum*, *Bdellium*,
Sagapenum,

For the
Knots in
the Joynts

Sagapenum, of each one dram, Oyl of Orrace, and white Lilyes, of each half an ounce, powder of Orrace one dram, and make an Emplaster. Or,

Take Briony Roots, Wilde Cowcumber, and Orrace Roots, of each two ounces, Roots of Marsh-Mallows, and white lilies, roasted under the hot Embers, of each four in number; the Seed of Nettle, Mustard, and Water Cresses, of each one ounce. Let them all be wel mingled, and stird about together with Goose Fat, and the Oyl of sweet Almonds, as much as will suffice, and make a Cataplasim.

Galen and others do much commend that which is made of old Cheese: for the Skin being broken and divided of its own accord, without any Section, it refresheth and comforteth the Joynts that are from day to day (without any hurt at all) freed from the Stones. *Viz.*

Take Old and tart Cheese, three ounces, or as much as you think fit; dip it in a sufficient quantity of the broth of Salt swines flesh, and then after you have sufficiently pounded it in a Mortar, let it be imposed upon the part affected. Others boyl the Salt Feet of Swine in water, until they be very soft and tender, and afterwards they mingle with them of old Cheese two parts, and Water Cresses one part, and so they make an Emplaster, which they greatly commend. Or,

Take Juyc of Tobacco three ounces, Citrine Wax two ounces; Rosin of the Pine Tree one ounce and half, Turpentine one ounce, Oyl of Camomile as much as wil suffice: and make a soft Cerore. Or,

Take Honey, Bears Grease, and sharp Vinegar, of each one pound or pinte, Mountain Snakes, and Snailles, one or two of them; boyl them in a Glazed Vessel over a soft fire, until the Vinegar be consumed; afterwards strein them, and add of Wax three ounces. Let them then beal dissolved together, and kept for use; and with this the place affected is to be anointed, by the fire side.

The Dirt that is found in some certain Baths (having in them a power to Mollifie and Relolve) are here likewise very useful; (such as are those of St. Peter, and Bartholomew, in the province of Padua) with which the part affected is to be fomented for an hour, and better, every Morning and Evening, and afterwards to be washed with the Bath-Water.

Erasistratus Sicyonius provided this excellent and effectual Remedy against these knobs and knots.

Take Oake Misletoe, one pound and half, Frankincense, Wax, Fat Torches, and Rosin of the Pine Tree, of each one pound. Those things that were dissolveable he melted, and stird them wel about, throughly mingling them with the Fat Torches; from the which when all the Fat was flown forth, he took the Liquor from the fire, and strained it, and then beating the Frankincense into a very fine powder he put it thereunto; dayly stirring it about, until he had brought it into a Mats that would not foul, or stick to his Hands. See more of this in Trallianus his Eleventh B.

Chap. 6. Of the Sciatick Pain.

The Sciatick Pain.

THe pain of the Hips (commonly called the *Sciatica*) in indeed a kinde of the Gout; so that there may nothing seem needful to be spoken as touching it, besides what hath been already said. But seeing that both in regard of the part affected it hath something peculiar, and that in the Cure there is something that is proper thereunto to be observed; we shall therefore speak a little further thereof.

There are indeed some, who by the *Ischiadic* or *Sciatica* pain understand some other affect, differing from the Gout, (which is to be accounted among the Chronical affects) and this happeneth also unto those that never were troubled with the Gout, either in the Feet, or in the hands, from excrements there heaped up together, or flowing into that part, and this for the most part a little now and then, and by degrees. But it is not our purpose here to treat of that affect; in regard that it pertaineth unto the impotency and inability in walking, by reason of something amiss in the Hip; (and extendeth it self further then the Gout; of which only our purpose is here to Treat;) and therefore we shall here handle the *Sciatica* pain, only

only as it is Arthritick, that is to say, a species or kind of the Gout, of which we have been hitherto speaking.

But now as touching the place affected, there is here some kind of Disagreement among the learned Physicians. *Aetius* (*Tetrab. 3. Serm. 4. Chap. 1.*) out of *Archigenes* writeth thus: They are properly (saith he) to be accounted *Ischiadick* or *Scia'ick* persons, that have a pain afflicting them about some certain Joynt of the *vertebræ*. But sometimes there goeth before this Malady, (and as it were, to Usher it in.) a pain of the Muscles lying neer, and especially the Loyns; but sometimes again the beginning of the affect is from the very Joynt it self: but now sometimes it so happeneth that the pain of the *Vertebræ* being almost taken away, the grief sticketh only about the Ham, and in some neer unto the Ankles, but in others the whole Leg is equally afflicted with pain; and many also have this pain fixed about their Groyns, and then indeed the grief and trouble being derived unto the very bladder produceth a difficulty of making Water; and then most especially it is that the whole Leg, from the Hips (even unto the very Heel) suffereth Pain.

Fernelius (in his *Sixth B. of the Diseas. of the parts, and the Symptoms, Chap. 18.*) saith, that the *Ischias* or *Sciatick* pain (being absolutely the most vehement of all the rest) hath not its seat in that Joynt by which the head of the Thigh is inserted and fastened into the Hip, but deeper, at the utmost of the Buttocks, by which the Nerves that proceed from the Loyns and the great bone, called *Os Sacrum*, or the holy bone, are carried into the Thighs; the great and terrible pain is not in the Hip alone, but it is likewise extended into the Thigh, and into the Calve of the Leg, and unto the extreame part of the Foot, to wit, whithersoever that branch that is derived from the Hip affected reacheth and extendeth it self. But some other, (as *Platerus*) attribute the *Sciatick* pain unto the Joynt, with the Thigh.

But here we are to understand, that about the Hip (as also now and then in the shoulder) there happeneth sometimes a pain, which is indeed very often most vehement, and yet nevertheless it is not properly a pain of the Joynts, in regard that it is not in any Joynt, because it seizeth upon the Membrane of the Muscles; neither again doth it consist alwaies in one and the same place, but for the most part descendeth downward unto the inferior parts. And such almost is that *Ischiadick* pain that *Aetius* hath described out of *Archigenes*. And I grant that this pain hath its original from the Serous and sharp Humor that floweth from the Head under the Skin, and sticking about some Membrane, or some Nerve: but now, that this pain is not properly the Gout, appeareth from hence; First, because it consisteth not alwaies about the Joynts, but also in the middle spaces within the Joynts. And so I have here Cured a person of honor, that suffered such a pain in the very Muscles themselves that are between the Knees and the Hip. And the like pains often happen in the Breast, and there excite a certain bastard *Pleurisie*. And then Secondly, because that they very rarely return by intervals, and constantly at some certain times; but often after they have afflicted a man once or twice, they return no more afterwards all the whole life long. Thirdly, because those that suffer these pains are not afflicted with the Gout in any other parts, which happeneth in the true Gout, and that is properly so called. For those that are long troubled with the Gout are very seldom afflicted with the Gout in the Feet alone; but they afterwards suffer pains likewise in their Hands, and their other Joynts.

And Lastly, likewise the true Gout (for the most part, if not alwaies) hath a Tumor or swelling Joyned with it; but now these pains have no such swelling Joyned with them; not only when they are in a deep place, but also when they are in a place that is not deep; as it often happeneth in the shoulder; and this cometh to pass for this Cause, to wit, that the Humor floweth not out of those Veins by which that part is nourished, as in the true Gout.

But we intend not here to treat of that pain, but only of that which is properly the Arthritick or Gout pain. But now that *Ischiadick* or *Sciatick* pain hath this proper unto it, that it is diffused more abroad then in the other Joynts, and oftentimes unto the places that lie next; and this happeneth, first of all, because that the Hip bone is large; from whence it is, that we distinguish it by three names; and when it is knit unto the sides of the *Os Sacrum*, we then call it the *Ileum* bone; when unto the hollow part of the said bone, we then call it *Ischium*; and when it is Joyned with the forepart, we then call it *Os Pubis* or the share bone. And then Se-

condly, because that the Nerves that come from the Loyns and the Os Sacrum to that Articulation, are distributed into divers parts: and therefore the pain of the Hip doth sometimes diffuse it self into all places, and reacheth even unto the Nerves that are derived from the Hip.

But now this Malady is very difficult to be cured, by Reason of the deepness and largeness of the place, and the abundance of the matter which the wide Place receiveth. They who being infested by a long continued pain of their Hips have the Hip-bone fallen out of its place, and again returning into its place, these have a filthiness and nastiness following thereupon; (in the sixth Section, and 59. Aphorism.) For if by the Humor flowing in the Ligaments be relaxed, the Hip falleth out of its place; and the Humor that is gotten into its Cavity is made dul and thick; yea and oftentimes it groweth there into a stony hardness; whereupon because the Veins and Arteries are moved out of their proper places, and are pressed down together, thence it is that an Atrophy followeth in the Legs. And if this Ischiadick pain invade any one in the time of youth, it threateneth the shortning of the life, because that by pain and hunger the sick person wasteth and withereth away; and from hence likewise the Ischiadick Consumption hath taken its Name.

As concerning the Cure, for Revulsion, the Basilick Vein in the same side is most fitly opened; but the Ischiadick, if it be for derivation. And indeed if the pain extend it self more externally; that Vein that is in the outward Ankle; or the Saphena, which is at the inward Ankle, if the pain tend more inwardly.

And Hippocrates likewise (6. Epid. Sect. 5. Text 21.) writeth, that when there are Kedmata present (by which Galen and others understand the fluxions into the Hip) then the Veins behind the Ears are to be scarified. But yet these think not that this precept of Hippocrates is true, or that it ought to be followed. But yet nevertheless Sceggins defenderh Hippocrates; and thinks that he did upon very good ground propound that which without doubt he had observed by experience. For seeing that the Cause of the evil destilleth into the Hip by the hole of the Nook, (or Fernelius his way) for the taking away the very Fountain and source of the Malady, he rightly determineth that the Remedy must be administred about the Ears. But if all this should be granted, yet nevertheless those Kedmata are not the Ischiadick pains properly so called (which belong unto the Gout) but those of which we made mention before.

The stronger kind of Purgations have here their place; and here the Caryocostine Electuary is of singular use, as also the Arthritick Pills, Pill. Fetida, and the Pills of Hermodactyls. Crato indeed (in his 247. Consil.) writeth that the Ischiadick or Sciatick pains will not admit of, nor bear purges; in regard that the Humors have seated themselves more in those places: but this is to be understood of an insufficient Purgation.

And here Vomitories seem to be more commodious then Purgers by the Belly, in regard that they evacuate the vicious Humors by a place more remote from the part affected.

But Repellers have here no place at all, because that it may justly be feared, lest by the use of these the blood and other Humors may be driven back toward the part affected, and may be there heaped up.

Having first made use of General and Universal Remedies, we come then to the imposing of Medicaments that attract and resolve, and these ought to be of the stronger sort, that they may call forth into the Superficies the Humor that is gotten into a deep place; which kind of Medicaments are provided of Herbs that discuss, viz. The Leaves of Eldern, Danewort or Wallwort, Lawrell, Rue, Betony, Camomil, Ground pine, Rosemary, Melilote, Mustard Seed, and Stavesacre; as also the flies Cantharides, Pitch, Sulphur, Turpentine, Ammoniacum, Galbanum, Bdelium, Opopanax, and Euphorbium.

Excellent likewise is that Medicament that is made of Sciatica Cresses (of which we made mention above,) as also of Water Cresses, and the Herb Piperites, or Pepperwort, as some call it. As,

Take Sciatica Cresses, Dittander or Pepperwort, and Water Cresses, of all, or one of them four handfuls: boyl them in Wine, and sprinkle upon them the Meal of Lupines, Beans, and the bitter Vetch Orebua of each one ounce, the powder of dry Rue two drams, Flowers

Flowers of Camomile one dram, Costus Root a dram and half, Oyl of Turpentine half an ounce, Oyl of Earth-worms as much as will suffice, and make a Cataplasm.

Or,

Take Mustard seed dissolved in the sharpest Vinegar two ounces, sharp and sour Leaven half an ounce, Powder of Hermodactyls two drams, Honey three ounces, Turpentine four ounces, Oyl of Lavrel and Spike, of each two ounces, the meal of Fennigreek seed, one ounce and half; Earth of the Ant. hill with the Ants Eggs, one pound; Leaves of Lavrel, Sage, Rue, and Rosemary, of each half a handful; Earth-worms prepared half a pound: let the Ants Earth and Eggs, with the Earth-worms and Herbs, be boyled in white Wine, and then being strained let the rest of the Ingredients be mingled therewith.

Or,

Take Roots of our Ladies seal (which being cut and applied to the Hip are much commended for the removing of the Ischiadick pain) six drams, the Emplaster Diachylon simplex half an ounce; Saffron dissolved in the Spirit of Wine two drams, Turpentine one ounce, Oyl of Spike as much as is sufficient; and make a Cataplasm.

Or,

Take Citrine Wax, and Turpentine of the Fir Tree, of each three ounces; let them dissolve together: when they shal be cold ad the Powder of Nettle seed, and Hermodactyls, of each two drams; Roots of round Aristolochy or Birthwort, Camomile Flowers, and Florentine Flower-de-luce, of each two drams and half; Mirrh two drams, Saffron four scruples: let them be moulded with the hands being first anoynted with Hogs Grease, and make an Emplaster.

Or,

Take Wax, Mistletoe of the Oak, Turpentine, dry Orrace, Mirrh, and Galbanum and with the Oyl of Earth-worms make a Cerot.

Unto which if the pain give not place, but stil continue, then apply Cupping-glasses with much flame, or else Vesicatories.

But if the Malady wil not yet by these be taken away, then we are according to the counsel of Hippocrates (in the sixth Sect. of his Aphor. Aphor. 60.) to burn the part affected; and Celsus likewise approveth of this advice, whilst (in his 4. B. and Chap. 12.) he writeth in this manner:

It is (saith he) the last shift, and in old diseases also a most efficacious Remedy, with glowing hot Irons to exulcerate the Skin in three or four places above the Hip.

This Remedy by heating the part dissolveth and evacuateth the thick and viscid humors; and if the Ulcers be kept open (as they ought to be) the vitious matter floweth forth by them. As for the manner of burning, see more in Paul. Aegineta his sixth Book, and Chap. 76. and Albucas. Part 1. Chap. 43.

And some there are likewise that make mention of the Gout of the Vertebrae of the Back, in special: and we grant indeed that now and then some such kind of Gout there is; and this hath also the very same Causes and so requireth the same kind of Cure with the other Gouts. But we are here to look wel about us, and to have a care that we be not deceived, in mistaking every pain of the Back for the Gout. For oftentimes it so happeneth that from the ferous and wheyish matter flowing down from the Head, and descending along the Back, and especially according to the Conveyance of the Cucullar Muscle (and sticking at the Spina Dorfi, in the end of the said Muscle) a pain may be excited; which yet nevertheless is not the Gout, in regard that it happeneth not in the parts pertaining to the Joynt; and it is oftentimes likewise of a very short continuance, and afflicteth the sick Persons in their sleep, but when they awake, and arise from their sleep, it leaveth them and vanisheth, which never happeneth in the true Gout.

Chap. 7 Of the Way and Means to prevent the Gout.

Many there are that mind only this one thing, to wit, that they may be freed from the present pains of the Gout; but being freed they take no care at all, how they may obtain that they be no more troubled with the same pains; neither do they make use of those Medicaments by which they might prevent this Evil, nor at all refrain from the Errors of their Dyer; and so they suffer the Malady again to arise, and so to continue and grow old with them; and therefore it is no wonder, that there are so few perfectly recovered of the Gout. But a precaution, and prevention, is altogether as necessary as the Cure in special so called.

The way
to prevent
the Gout.

In what
things it
consisteth.

Now this Consisteth in three things: The first is this, that there be care taken that there be no matter suffered to gather together which may flow unto the Joynts. The second, that if any matter be gotten together, it be taken away before it rush unto the Joynts. And the third is this, that the Joynts may not easily receive the same. Now if (as many do) any one shall make it his business only to strengthen the Joynts, and in the mean time shall permit the heaping up of the vitious matter in the Body; the Patient shall hence reap more hurt than good. For if there shall be a vitious Matter present in the Body, and this not thrust forth unto the Joynts, after the usual and accustomed manner, being retained in the Body it may flow unto other of the more noble parts, and be the Cause of most grievous Diseases.

And therefore we are here first of all to commend unto the Patient a good course of Dyet, and Medicaments that correct the distemper of the Bowels; the first intention being best performed by this. The second thing required is accomplished by Blood-letting, Purging, and other things that take away the ferous and Tartarous humors. The third, by those Medicaments that strengthen the Joynts.

The first
member of
prevention
is the Dyet

And first of all, As touching the Dyet, this is absolutely necessary, and may do much in the prevention of the Gout; and indeed it is of so great consequence, that without it the Medicaments (let them be never so excellent) wil nothing avail. And that so few are cured of the Gout, this for the most part happeneth by reason of the too great liberty and licence they take in point of Dyet. And on the contrary, a due course of Dyet hath been known it self alone oftentimes to vanquish this Malady: and *Crato* (in his 161. *Consil.*) writeth truly; *I think (saith he) that there is nothing more to be taken care of for those that are troubled with the Gout, than a right and due course of Dyet. For what Medicaments are there that can either draw forth the matter it self, or strengthen the Heat?*

And so likewise *Solenander* (*Seet. 1. Consil. 20.*) *We observe (saith he) that many by their care and diligence have made themselves free from the pains of the Gout; some by their being abstemious; others by their forbearance of Venereal embraces; a third sort, by reason of their continual using this or that proper Medicament: And others again, by their shunning of this or that kind of Meat, as hurtful in reference to this their Disease.*

Now the course of Dyet doth chiefly consist in the right use of the six things not Natural. And first of all, as touching the Air, let the excess of every Air in its qualities be shun'd; (for this may either retain, or disperse abroad the vitious humors in the Body) and especially the cold excess that retaineth and keepeth in the transpiration, and that notable exhaling of the vapors; yea and it forceth the wheyish humor from the outside of the Body unto the Centre, where it afterwards soon becometh over-hot (and boyling as it were) and then beginneth to be stird up and down. And therefore let all those that are troubled with the Gout very carefully fence themselves against the external injuries of the Air, by wearing of such warm Garments as are fit for them; and let them beware that the external Cold do not thicken the Habit of the Body, and so hinder the flowing forth of the vapors. And if it shall so happen that the habit of the Body shall be condensed, it is then again to be rarified by frequent but gentle frictions.

The quan-
tity of the
Patients
Food.

But more especially there is an exact and accurate regard to be had unto the Meat and Drink, and the constant Dyet of the Patient. For it being so that the Meat and Drink is wont to supply the matter of the Gout, unless the sick Person shall abstain from all food that is hurtful for his grief, or commit any errors in the use thereof, he shall but in vain hope for health and recovery. And therefore when the sick Persons shall themselves come to understand and take notice what meats are hurtful for them (as we told above of one who by the eating of Carps evermore fell into the Gout) then let them carefully and wholly abstain from them. And so also for the quantity of the food that is taken, it must be no more than what sufficeth for the refreshing of the Spirits, and the preservation of the strength of the Body. And he ought not upon any occasion to take in more food than what may rightly be concocted in the Stomack, Liver, and Spleen: which is then done if he take only that quantity of Meat and Drink that (according to the advice of *Hippocrates*) he alwaies rise from the Table with an Appetite, and that he never so fill himself with Meat and Drink, that he leave remaining no desire at all, nor any further appetite thereto. For since that in these Concoctions that which is excrementitious is wont to be separated, if those Concoctions shall not be rightly performed, many Excrements (and those Tartarous) are mingled with the Blood; which afterwards (as altogether useless) are by Nature, at her own time, thrust forth unto the Joynts. Or if it should so chance that the sick Person offend by taking too much food at one meal, he must be so much the more sparing in the meal following. And so likewise

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it will be to very good purpose, if once in the week he wholly forbear, or at least that he Eat a spare supper. And there ought likewise no new food to be taken until the former be Concocted. His supper must alwaies be more sparing then his dinner: and variety likewise of Meats at one and the same Meal is to be avoided, as being altogether as hurtful as the over great quantity and excess.

And therefore let his bread be pure, and leavened; the flesh that he Eateth let it be Wether Mutton, Kids flesh, Veal, and the like, of a good Juyce and Aliment. There is likewise allowed young Beeffe, especially in such as are hotter then ordinary: and *Alexander Trallianus* in his 11. B. Chap. 1. writeth, that he knew some who being troubled with an extream great and sharp fluxion, were chiefly holpen by the eating of Beef. Some there are that conceive there ought to be an abstaining from the flesh of Hens and Capons, and this therefore, because that it yieldeth much nourishment. But Meats of Good and much Juyce were never yet known to cast any one into the Gout, if there were not an Error committed in the Quantity. Others there are that think Cocks, Capons, and Hens, to be therefore hurtful for those that have the Gout, because that they themselves are now and then troubled with the same; which may indeed likewise happen for the Cause that we shall now shew you. For (in my Opinion) it seemeth most agreeable unto truth, that this cometh to pass, because that Cocks and Hens do likewise pick up and Eat Sand, and little Stones, and concoct them in their Maws; from which there may easily be derived into their very blood something that is Salt, Earthy, and Tartarous; and this may afterwards yield matter of the Gout unto him that eateth of their flesh. And this Opinion *Crato* (in his 246 *Consil.*) seemeth to favour, when he writes that the Capon hath a peculiar humor, which Nature driveth forth unto the Joynts. Let him Eat fish very sparingly; but from Carps, and moist fish (as Eeles and the like) let him altogether abstain: as also from those Meats that have in them a power to bind the Belly; or that cool the Stomach. And so likewise the use of much Cheese is not safe. He must abstain also from all kind of Pulse, that contain in them much Earthy Juyce. And because that (as *Crato* writeth in his 247. *Consil.*) between Wine and the Cabbage there is found to be a certain kind of Natural Antipathy, it is thought very fit, that such as are troubled with the Gout (as unto whom Wine is very hurtful) do often feed upon Cabbage and Barley Bread. And *Pliny* in his 20. B. and 9. Chapter, writeth thus: *I finde (saith he) that many have been freed from the Gout by eating the Cabbage, and drinking the broth thereof being boyled.* And many there are that upon very good ground condemn the use of apples; and advise the Physicians (led hereunto both by Reason and Observation) that they forbid the eating of Apples unto such of their Patients as they finde subject unto the Diseases of the Joynts. For Apples abound with moisture, and this for the most part partaking of some acrimony, and such as hath a power of penetrating (by reason of which it is that those spots that are caused by the Juyce of Apples can so hardly be gotten out of Linen) and therefore do very easily move the Humors. Let all fat Meats likewise be avoided, and especially fried Meats, as such as do not only afford an ill and vicious Nutriment, but also corrupt other Meats; as likewise Meats overmuch seasoned with hot Spices.

But a more then ordinary Care must be had in the Choyce of the Patients drink. For it is altogether Requisite that he wholly abstain from the Moravian, Austrian, and Hungarian Wines, and such as are like unto these, which do most certainly breed the Gout. But as for others (which in such as are found do not so easily generate the Gout) they may be drunk, but it must be very sparingly, in regard that even these also contain in them some kind of Tartarous matter.

Among these Wines that are wholesome, *Solenander* in the 24. *Consil.* of his 4. *Señt.* reckoneth up likewise the Thick, Red, Spanish Wine, which they call Alicant, or the Wine they call Tent: and of this Wine he alloweth a moderate use unto such as are troubled with the Gout, as being but little, or less hurtful for them. Others commend and allow of the *Pucine* Wine; as likewise that they bring unto us from the Vale of *Telina*; by reason that they have not in them so great a power of hurting the Joynts.

And if the Patient perceive that even these Wines also are naught and hurtful for his Disease, and that they offend him; let him then (if he can) altogether abstain from

The quantity of his Food.

Hens, Cocks, and Capons hurtful in the gout.

from the drinking of any Wine; in regard that it may so be, that for such as are subject unto the Gout, even those Wines may hurt and offend them, which others drink without any hurt at all. And *Paulus Aegineta* (in his *Third Book of the matter of Physick*, Chap. 78.) writeth in this manner. I have known many (saith he) who by their altogether abstaining only from wine, have all of them sensibly found help. For some in the very beginning of their Disease are perfectly freed from their fits, and others of them afterwards, and in these also the fits come but seldome; and when they come they are extremely painful. If therefore there happen (from this abstinence) nothing prejudicial, either at present, or that nothing be feared for the future, let them abstain from Wine all their Life long. But as for those who by this their abstinence have brought a weakness and cold disposition upon themselves, and are thereby rendered unfit for their employments, when they have for two years abstained from Wine, after this let them perpetually drink a little thereof at a time, and let it first be qualified with Water. But as for those that abstain from Wine, they ought in stead of their Wine to drink the Decoction of Aniseeds, or some such like Seed, abstaining (as much as may be) from Fruits, Apples, and the rest of those Cooling Fruits. Thus *Aegineta*.

And in very truth, that the Case thus stands, we have above, (in the *Second Chap.*) proved by examples. And in our own Countries, they that will may far more easily abstain from the drinking of Wine, then those in Greece, and elsewhere: in regard that good beer may every where conveniently enough be had, which may supply the place of Wine, and very well serve in stead thereof. And although it seem very hard unto many (yea and hurtful also unto some) wholly to abstain from Wine. Yet Nevertheless (as it is rightly said by *Hippocrates*, in his 50. Aphorism) there is also sometimes a Change to be made unto that which we have not been accustomed unto. But if there be any that will not be perswaded wholly to abstain from Wine, (or if indeed they cannot, without great prejudice unto their health, as it very often happeneth) let them then drink Rhenish Wine, but not such as is strong, or Crude; or else the *Pucine* Wine also, or the like; and yet neither these in too great abundance, but with all possible sparingness. And therefore we like very well of *Solenanders* advice, who (in his 4. Sect. and 24. Consil.) perswadeth us, in the use of Wine, to have regard unto the Temperament, Constitution of the Body, Age, and Custom; since that there is great difference in Bodies; so that what is good and wholesom for one, the same may to another be altogether useless and hurtful. And therefore in the use of Wines, we are especially to observe what benefit or damage the sick person may receive from it. For if it be found that the drinking of Wine hurteth those that are thus affected, there must then be a total abstinence from it; or if it may not be wholly omitted, it must be most sparingly drunk. And as for those who in the use of Wine cannot moderate themselves, nor observe a mean and set bounds unto their Appetites, we think it fitter to forbid the use of Wine unto such persons, then to allow it them. But yet however all generally are wholly to abstain from Wine in the beginning of the Paroxysm. Neither must wine at any time be drunk upon an Empty Stomack, but then only when solid food is taken. It is likewise very hurtful to drink Wine betwixt Meals, in regard that it doth then easily penetrate unto the Liver and excite fluxions.

The quantity of his drink. Let the Patient content himself with so much drink only as may suffice for the satisfying of his Thirst, without causing any fluctuation of the food he hath Eaten.

Rest and sleep. As for his Sleep and Rest, let them be moderate; and let him not Sleep immediately after he hath Eaten and Drunk: and when he doth Sleep, let it not be above seven or eight hours at the most; yet seven hours Sleep he may well be allowed.

Exercise. Let the exercise of his Body be moderate, and let it alwaies be before dinner, or supper. And if the Aphorism of *Hippocrates* be true in any Disease, it is true in this: viz. The exercise of health is this, not to be oversatiated with food, and to be active and industrious in pains taking, and in the works of our calling. And very good it is for those that are able, before dinner sometimes to exercise themselves even until they sweat. But then after this motion and exercise of the Body, Let him neither Eat nor Drink, before such time as the heat contracted by the motion be wholly vanished. And if there be at any time an Error committed, in the excess either of rest or motion, better it is that it should be in motion, then in idleness and

and Rest. For by Idleness and slowness the heat is much diminished, and the strength of the Body made to languish, the Concoctions to be depraved, and the Excrements not evacuated and driven forth of the Body. Whereupon it is that *Galen* (in the *Sixth Sect. Ephorism 28.*) tells us that ease and idleness is as much the Cause of the Gout, as *Epicurism*, and *Satiety*. And we may see by experience that Men addicted to labor and exercise are seldom or never taken with the Gout. And instead of the Morning exercise the Patient may likewise sometimes use frictions or Rubbings, so soon as he is up in the morning. To stand much, as also to walk overmuch, or to ride long Journeys, is greatly hurtful for such as are troubled with the Gout.

And in the like manner as Exercise and Rest, so also ought the Patients sleep and abstinence therefrom to be moderate, and alwaies in a mean. And yet of the two extreams, better it is to want sleep, then to exceed therein; provided that the strength of the Body be hereby nothing impaired, nor Crudities bred. Neither may the Patient accustom himself to sleep presently after meals.

As for fulness and emptiness, Care must be taken, that the Belly be made every day to discharge its office; and that the Humors may not be heaped up in the first waies, *Eccoprotick* or Cutting Medicaments are sometimes to be made use of; for these do gently ease and empty the Belly. Sweats in the morning are very useful and convenient for the prevention of the Gout, in regard that they take out of the Body the serous or wheyish Humors. And therefore the sick persons are by all manner of means to accustom themselves unto these sweats; and to this end, they ought well to cover themselves with Bed-clothes at night when they go to Bed; that so in the morning if they sweat not, yet they may have a Moistness all over their Bodies. The Patient ought likewise to abstain from excessive *Venerie*, which together with *Bacchus* (or Wine) is the Parent of the Gout, as begetting and breeding it: for (as *Scaliger* turns it out of the Greek) of Loyn-loosening *Venus*, and Loyn-loosening *Bacchus*, there is born and bred the Loyn-loosening Gout. For by the overmuch use of *Venerie* the whole Body is debilitated, and the spirits and Native heat dissipated; whereupon all the Concoctions are hurt, and many Excrements are treasured up.

The immoderate affections of the mind, (and especially Anger and Fear) are to be shunned; and the Patient is rather to give himself unto Mirth and Cheerfulness. *Affects of the mind.*

And that kind of Diet which is observed by Rich persons, and people of rank and quality, is the true Cause why these are more frequently taken with the Gout, then poor people, and such as live in the Country. For the Rich aboundeth with store of all kind of Meat, and dainty dishes; and thereupon they usually eat of many dishes at one and the same meal; and not only so, but they also exceed in the quantity, and take too much thereof, even more then they can Concoct; and hereupon Crudities are generated; and especially they too much indulge themselves in the use of Wine. And then again they want those Laborious exercises by which the excrementitious Humors in the Body (and chiefly, the serous) might be evacuated. And moreover, for the most part they abhor all manner of Medicaments; and they wil not at all make use of them, unless they be fitted for their Palates. *why the Rich are more troubled with the Gout then the poor.*

And so in general, those things that are by the Physicians (in other Cases) commanded as touching a good and orderly Diet, they are here especially to be observed by such as are troubled with the Gout; concerning which *Alexander Trallianus* largely treateth, in his *Eleventh B. and 1. Chap.* and so also *Andreas Gallus*, in his *Consil. Collected by Scholtzius, Consil. 270.* And *Petrus Andreas Matthiolus*, *ibid. Consil. 220.* and *Antonius Ferrus*, in his *Treatise of the Gout.*

And yet notwithstanding besides a good course of Dyet, it is likewise necessary (lest that the vicious Humors should be heaped up) that there be no notable distemper suffered to be in the Bowels. And therefore if there be any distemper of the Liver, or Spleen, or that the Stomack being colder then ordinary cannot rightly Concoct, those distempers are in a fit and convenient manner to be Corrected, as we have further shewn you in its proper place. *The distemper of the bowels to be corrected.*

For

For unless those Bowels be wel constituted (although there be little or no Error committed in point of Dyet) yet notwithstanding, good food (albeit it be taken in a just quantity) is converted into a vicious humor, or supplieth such a Blood that is not pure, but hath likewise vicious humors mingled therewithall. Whereas on the contrary, Those that have their Bowels wel constituted and strong (which exactly separate from the useful Blood that which is faulty in the Meat and Drink, and evacuate it forth by convenient waies) may overcome many Errors of Dyet; as we see many greedy gluttonous Persons stuffing themselves with abundance of food, and guzzling in dayly great store of Wine (and this not alwaies so wholsom as it should be) and yet notwithstanding all this they are not at all troubled, nor so much as subject to the Gout.

But because that it is altogether impossible but that he which lives not unto himself alone, but hath his dependance for the most part upon others, and is a Servant unto the publique, or is set over and imployed in other kind of affairs, and is sometimes necessitated to live in an unhealthy Air, or to ride Journeys, or to sojourn with others; it being impossible (I say) that they can keep themselves from all kind of Errors in point of Dyet, and that thereupon Excrements should be collected in the Body; it ought therefore to be one main part of the Physicians care that he prevent (in this respect) the heaping up of those Excrements in the Body, lest that they afterwards excite the Paroxysm; which is done if they be maturely taken out of the Body.

Venesection.

Venesection.

And therefore in the first place, although the Gout doth not immediately arise from the Blood, as such; yet notwithstanding in regard that it may in its own manner concur unto the generating of the Gout, while it either maketh for and furthereth the extream and boyling heat of the wheyish humor, if it aboundeth; or else may be an impediment in the exhibition and administering of those Medicaments that are necessary; the Blood may therefore be evacuated. But as for such as have Naturally a very weak and cold Body, such as these receive more hurt than help from this evacuation of the Blood, as *Paulus Aegineta* tells us in his 3. B. Chap. 78. and so likewise for those that have already of a long time been troubled with a frequent fluxion; for by those often afflicting pains, and restlessness, the Spirits are dissipated, and the strength of the Body much dejected. But now this Evacuation of the Blood is most convenient in the Spring and Autumn. But yet in some it is requisite that this taking of Blood from them be not done only at once, but by often repetitions, some now, some then. For if the sick Person be one that useth a full and free Dyet (eating and drinking liberally) upon the very first alteration of the Air there is wont to happen a motion and boyling heat of the humors. But because that in the preservation we are not wont to have any respect unto the part affected it self, but only our mind and purpose is to evacuate the Blood when it aboundeth, it is most fitly taken forth (not only in the *Podagra* or Gout in the Foot) but generally in all Gouts whatsoever, by opening a Vein in the Arm. But if the Malady be in the Arm alone (as it is in the *Chiragra* or Gout of the Hands) then the Vein in the Thigh is most conveniently opened.

There are some who for such as are troubled with the Gout in their Feet do prescribe the opening of the Veins in their great Toes, and that every month, and then not all at once, but by repeating it a second or third time: and I my self have known those that have received great benefit hereby. And this practice of theirs is grounded upon Reason. For Nature is wont chiefly and principally to thrust forth the vicious humors unto the extream parts of the Body, and to the Veins, and especially those unto which she is accustomed to excite a fluxion. And therefore seeing it is probable, that in those who are troubled with the Gout Nature doth send the Tartarous humors in greater abundance unto the Veins in the great Toes, than unto any other parts; therefore they are most conveniently evacuated by opening a Vein there. Neither can the strength and vigor of the Body be very much impaired by this evacuation, so that it be not in the extream. And that which *Coslius* (in his 3. B. upon *Avicen. Sen. 22. Tract. 2. Chap. 2.*) writeth, that he saw one who having had a burning made in his Thigh by the Physician, there flowed forth very frequently great store of a humor altogether Black (upon the evacuation of which the Affect was wholly removed) seemeth very much to favor this Opinion. And others for the same end and purpose every month apply Cupping-glasses unto the Soles of the Feet; and this must be before the new Moon, and without any Scarification at all. And I know a certain Person of quality, who by the alone use of these preventeth the Gout.

But

But as touching the evacuation it self of the serous and Tartarous humor, let this be by the Belly, by the superficies of the Body, sensibly, and insensibly; by the Urine, and by Issues.

Purgation.

Purgation (which indeed bringeth with it the greatest benefit of any other) is to be begun with Medicaments that evacuate the serous humor by the Belly. And it hath been found by experience, that some certain Persons who have been troubled with this Grief have found greater benefit by often repeated Purgations, than they have by any other Medicament whatsoever; and that Purges have oftentimes benefited much without any other Medicament whereas all other Medicaments without Purgation are altogether unavailable, or at least afford but small benefit. Neither is there any danger at all to be feared from these Purgations, especially if those Purging Medicaments be not overstrong. Wherefore not without cause is it that *Solenander* (in his 4. Sect. and 24. Consil.) so confidently affirmeth, that there is more of the Spirits resolved by Pains, the Strength more impaired, the Limbs more weakened, and lastly, the faculties of the whole Body more altered by the influx of the humors into the Joynts in one Paroxysm only, than by seven of these moderate purging Medicaments; as it hath been found by the experience of those that have made use of them.

And indeed this evacuation is most conveniently made in the Spring time, and the Autumn, a little before the Equinoctial; at which time the humors are wont to be moved of their own accord. Yea and if any will use that diligence that is requisite in the prevention of the Gout, he must Purge his Body three or four times in the year. Which Purgation (together with Venesection, and a right course of Dyet) maketh very much for the preventing the Gout; touching which *Galen* in his 7. Chap. of the way of Curing by Venesection. I myself have Cured very many (saith he) who for three or four years (by Intervals, and at some certain seasons) had been troubled with pains of their Feet, by purging forth in the beginning of the Spring the abounding humor, and by diminishing of the Blood. But this ought to be known and well understood by all, that they are to be very moderate throughout the whole course of their Dyet. For as for such as are intemperate, given to Drinking of Wine excessively, and such likewise as are addicted to their Bellies, and indulge their Appetites, there is but little good or help to be expected by them, either from Purgation, or Blood-letting. For by the intemperancy of their lives they get together, and heap up great store of vitious humors. Now as for these we are not so much as to afford them any the least helping hand, or assistance; thus *Galen*.

Now it is well worth our Consideration, by what Medicaments those Purgations are to be instituted, and carried on. There are some indeed who here commend their *Aurelii Poppers*, and their Mercurial Medicaments, which do both provoke to vomiting, as also Purge by the Belly. But for my own part I shall not persuade any to make use of these for his preservation from the Gout: Let him do it at his own peril who ever hath a mind to it. But much less shall I persuade any one (as I find that many have given counsel thus to do) that he four times in a month (always after the Changes of the Moon) take *Mercurius Vita*, thereby to cause both Vomiting and Stools. For since that those Mercurial Medicaments cause extraordinary agitations and stirrings of the humors, and do withall weaken the Bowels, they more hurt than benefit those that make use of them: neither let any one persuade himself, that the said Cure of preservation can possibly be accomplished in one month.

There are others again who conceive that only those most gentle and easie Medicaments are to be used: but these are scarcely at all times able to draw forth the peccant humor. The truth is, as it is most safe, so it is likewise most beneficial, to make use of those Medicaments that indeed hurt neither the Stomack nor the other Bowels; and yet notwithstanding they evacuate the peccant humor as much as is needful. From which neither *Scammony*, nor *Turbit*, nor *Hermodactyls* are altogether to be excluded: but *Sene*, *Agarick*, and *Rheubarb* have a chief place among them.

But besides these ordinary and yearly evacuations, there are likewise every month (yea, and oftener if need require) certain gentle Medicaments to be made use of; which sensibly derive the matter unto the Bowels, and keep the belly loose. Yea, and if every week twice, one hour before supper, the sick person take either a scruple of some gentle Pills, or some other such like Medicaments, he shall soon find no small benefit thereby. And such are the *Syrup of Roses solutive*, and *Honey of Roses solutive*, *Syrup of the Harts marrows*.

marrow (commonly called the Domestick or House Syrup) the seed of *Carthamus* or wild Saffron, Danewort (or Dwarf-Elder) Aloes, Agarick, Rheubarb; especially where the Colerick Ichores abound. Yet nevertheless, seeing that these alone (as we have already said) are not sufficient, unless the party take likewise every yeer twice or thrice those Medicaments that are somewhat stronger, in the spring therefore, and at Autumn there is to be administred a Purgation that is somewhat stronger than ordinary.

But now here to set down the many forms of those Medicaments, I hold it not worth the while; in regard that such as are most proper for every ones Constitution are best of all prescribed by the Physitian who is present, and may therefore most rightly discover the Patients Constitution. And although that Serous and Tartarous humor be the highest cause of this Malady; yet notwithstanding sometimes these, and sometimes those vicious humors do mingle and joyn themselves with the humor aforesaid, and they are therefore withal to be evacuated. And there are but very few purging Medicaments that do not withal likewise evacuate the said wheyish humor.

The Caryocostine Electuary of Bayrus. They here greatly extol the *Caryocostine Electuary*, invented and commended by *Petrus Bayrus* in the 18. B. and 1. Chapt. of his *Practice*; although without doubt the Ancients (*Aetius*, and *Paulus Aegineta*) gave the first occasion for the Composition of this Electuary; and in them there are many things to the like purpose. Now the aforesaid Electuary is made in this manner:

Take white *Hermodactyls* (their upper rind being taken off) and *Diagrydium*, of each two drams: *Costus*, *Cummin*, *Cloves*, *Ginger*, of each one dram, and make a Powder.

Or which the Dose is one dram, more or less. Or else being beaten very smal and searfed, let them be mingled with the Syrup that is made of Honey and white Wine (boyled until they have attained the form of a Syrup wel boyled) and then make an Electuary: The Dose hereof is from two drams to half an ounce. And *Bayrus* writeth, that so soon as ever he perceived in himself signs of Repletion, he took this Electuary three or four times in the yeer; and by this means he kept himself (for twenty six years) altogether unmolested by those pains with which he had been formerly assaulted. And indeed it wil not be amiss then to make use of some Medicament that is proper, when we find there is so much of the humors already collected, that the Paroxysm seemeth to be very nigh at hand. And here we are likewise to commend unto you *Rhases* his Pills, described before in the Cure: and so likewise these:

Take *Groundpine* or *Herb Ivy*, half an ounce; *Germander*, *Arabian Lavender*, of each three drams; *Hermodactyls* half an ounce; *St. Johns wort* one dram: *Aloes Hepatick* half an ounce: with *Turpentine of Cyprus* make Pills.

Whether or no Hermodactyls be convenient in preservation from the gout? But now as for those Medicaments that are made use of more frequently (every, or every other week, or three weeks, or a month together) these ought to be more mild and moderate. And here *Adrian Spigelius* writeth, that he in the preservation of himself from the Gout never made use of *Hermodactyls* in any Purgation; since that it is not requisite that we draw forth the Humors out of those parts into the which as yet nothing hath flown; but he adviseth us to content our selves with those things that evacuate the humors out of the greater veins; unless haply it be in the old knotty Gout (which hath more frequent invasions) or that (as we said before) the Paroxysm be now nigh at hand. Which as we grant it to be true in those Purgations that are more frequently (and in shorter intervals) administred: so in those Purgations that are to be twice or thrice every yeer, we conceive that *Hermodactyls* may most fitly be mingled therewithal; and these all the more experienced Physicians, even unto our daies, have made use of; as without doubt having all of them learned by experience, that *Hermodactyls* had in them a peculiar power of evacuating those humors breeding the Gout. And the Author of the little B. touching the *Podagra* or the Gout in the Feet, (whose name we find not, and yet we find his Book among the Writings of the principal Physitians) writeth, that he himself knew by experience, That in the Gout (whatever the peccant humor were) that Purgation that was made with *Hermodactyls* in it was more useful and effectual in this case than any other. And hence it is also that *Rhases* his Pills, and the *Caryocostine Electuary* of *Bayrus* have *Hermodactyls* in their Composition. But now that those Medicaments may be taken without any nauſeousness or loathing in the Stomach, their forms are to be changed; and they may be taken sometimes in the form of a Powder, sometimes of Pills, sometimes of Electuaries, and sometimes in the form of little Rolls, or Morfels, as they call them.

A Vomit. A Vomit also is here very good, and bringeth much benefit along with it, if Nature be able easily

easily to bear the same; in regard that it doth best of al exclude and evacuate Coler and Flegm sticking in the first waies or passages.

Antipodagrick Medicaments; Or, Medicaments against the Gout.

The Body being purged, after this Antipodagrick Antidotes are to be made use of, that so the remainders of the Humors that escaped the purgations may by those be quite consumed; and that the body may (by once taking of them) be disposed unto the morning sweats; or that the serous humors may insensibly be discussed, as we shal anon shew you, when we come to speak further of the power and virtue of these Medicaments. Those kind of Medicaments were with the Ancients of very great use; and by them they are greatly commended: and there are very many of them extant in *Aetius* his *Tetrab. 3. Sermon. 4. Chap. 47.* *Alexander Trallianus* in his *11. B. Chap. 62.* And amongst the latter Physicians also such like Medicaments are every where to be found. Medicaments against the Gout.

And among those Medicaments, in the first place we meet with Treacle; touching which the Author of the Book of Treacle, to *Piso*, in his 15. Chapter, writeth: *But it most of all profiteth (saith he) when any one shall frequently take thereof whiles he is yet well and in health; in regard that it consumeth the superfluous humors of the whol body, and changeth likewise the temperament thereof.* And a little after: *I advise (saith he) that every man in such like diseases would use Treacle; because that it both drieth up the superfluous humors, and permitteth not that any other be bred; whereupon very many from the use of this alone in the beginning have been altogether freed from the Gout.* Treacle

Aetius in the place alleadged hath this description of the Antidote consisting of four things, by some called a *Mystery*, viz. The Antidote of four things

Take *Gentian*, *Bayberries*, *Mirr*, equal parts, and make a powder. Give hereof every day half a spoonful in hot Water.

Oribasius in the place alleadged hath another description hereof.

Take *Germander* one pound; *Gentian*, round *Aristolochy* or *Birthe-wort*, of each two ounces; *Rue seed* one sextary: Let them be well bruised and searsed. Give dayly hereof one spoonful.

That which is made of seven things, hath as followeth:

Take *St. Johns wort* one ounce; *Centaury*, and *Groundpine*, of each three ounces; *Gentian* five ounces; round *Aristolochy* one ounce; *Agarick* three ounces; *Parsley* one ounce; *Attick Honey* five pound. The Dose one dram in three Cyaths of Water. The Antidote of seven things.

But *Aetius* chiefly commendeth the Antidote of *Centaury*; and he writeth that he knew many cured by the use thereof; and that it was so wholsom for such as were troubled with the Gout, that the use thereof had enabled many that had been affected herewith fifteen yeers, and so wel recovered them that they went journeys on foot; and that it was grateful to the stomach, convenient for the belly, and provoking much urine. The manner of making it is thus: The Antidote of Centaury.

Take the tops of *Centaury* the less, *Roots of Centaury* the greater, *Germander*, *Gentian*, round *Aristolochy*, of each alike, as suppose one pound. Let one dram hereof be given (for fourty daies) out of hot water; and in the other three hundred twenty five following daies of the yeer, let half a dram be administred after the same manner.

And the same *Aetius* likewise very highly commendeth the Antidote of *St. Johns wort*, as that which cureth al manner of Gouts, the Disease of the Hips, and al diseases of the joynts in general, being drunk for the space of one whol yeer; that it warmeth and cherisheth the stomach, maketh the sight sharp and quick; and that it maketh the rest of the senses also more cleer, and fitter for the discharge of their severall Offices; that it gently evacuateth the Urine; and that it is excellent good in the falling-sickness, that it freeeth from the great and grievous pains of the head; and lastly, that it mollifieth the Liver and the Spleen when they are hardened into a *Schirrus*. The Antidote of St. Johns wort.

Now the manner of making it is this:

Take *Germander* nine ounces; *Centaury* eight ounces; round *Aristolochy* seven ounces; *Gentian Root* six ounces: the tops of *St. Johns wort* five ounces; *Parsley* four ounces; *Spignel* three ounces; *Valerian* two ounces; *Agarick* two ounces; *Honey well scummed* three pound.

Alexander Trallianus greatly commendeth this Antidote of the Philosopher *Heraclitus* as much approved of by many. Viz. Heraclitus his Antidote

Take *Spicknard* two ounces; *Gentian*, long *Aristolochy*, round *Aristolochy* or *Birthe-wort*, wort,

wort, the best Myrrb, Bayberries, Rhapontick, of each half an ounce. The Dose is one dram. The best time to take it, is the beginning of the Spring, and the Autumn; and indeed in those places and persons that are cold, the Spring time; but in others that are more hot, the Autumn.

The Antidote Diacorallium: The same Trallianus preferreth the *Diacorallium* Antidote before al other Antidotes whatsoever; which is thus made:

Take of Corals two drams; Mirrb four ounces; Cloves half an ounce; Rhapontick one ounce; Peony Root the like quantity; long and round Aristolochy, of each two ounces; Spicknard four ounces; and make hereof a Powder.

And of this he giveth in the morning one scruple, out of warm water; and after it he enjoyeth abstinence from al kind of food for six hours (but yet the truth is a shorter time of fasting may suffice) & maketh the beginning hereof about the Kalends of January, and so continueth administring of it for a hundred daies (by reason of the long continued perseverance of the Indication, as Cappivaccius explaineth it:) and then for thirty daies he intermitteth the administring of it (because of the strength and powers of the body, that they may be recollected, as the same Cappivaccius tels us.) And then again he administreth it for a hundred daies more; and so again, as before, he intermits for thirty daies. When the two hundred and sixty daies (wherein there were two hundred potions administred) are over and past, he then giveth it again, but now not every day, but only every other day; and so in a hundred and three score daies he administreth four score Potions. And afterwards again in two hundred and sixty daies he administreth eighty Potions, giving them every third day until the three hundred sixty five Potions shal have been al taken. But he warneth them that take this Antidote, that they abstain from Anger, Venery, Astringent and sweet Wine, al kind of bitter Pot-herbs, the heads of Fish, Crabs, and Crevishes, Lobsters, Beels, Hares flesh, al kind of Pulse, but more especially Beans. And many more of such like Antidotes there are to be found in *Paulus Aegineta*, *Aetius*, and *Trallianus*, in the places before alledged.

Out of these afterwards (in the Ages not long before ours, and in our Age also) there arose divers other such like Compositions. *Thomas Erastus* telleth us that he had two of these communicated unto him, and extolled with high commendations: One of them that was given him by an Italian Physitian (who called it the Powder of Jupiter) and was imparted unto him by Doctor *Conradus Gesnar*, is made in this manner following:

Jupiters Powder: Take Round Aristolochy, such as is right, the true Rhapontick, of each one ounce; Macedonian Parsley seed half an ounce; Germander tops, Centaury the less, and St. Johns wort, of each ten drams: make a Powder hereof.

In the first month give every day one dram hereof, out of warm Water; and afterwards half a dram, for one whol yeer; every month you must also order the Patient to take a purge or two; or else (for such as are flegmatick) you may intermingle the Powder of Agarick with the aforesaid Powder, a little to purge the sick person.

The other Composition bestowed on me by *Dn. D. Christoph. Wirsung*, an Augustan Physitian) is thus to be made:

Take the true round Aristolochy, Gentian, Rhapontick, or Centaury the greater (but I think the true Rhapontick to be better) the tops of Germander, Groundpine or Herb Ivy, of each alike, and make a Powder. Let there be one dram hereof taken for the one half of the yeer; and for the other half of the yeer half a dram.

Doctor *Johannes Mattheus* (out of an old Manuscript) produceth this Powder, as he there findeth it prescribed, *Viz.*

Take Rhapontick one ounce; Agarick two ounces; Valerian three ounces; Macedonian Parsley seed, and Spignel, of each four ounces; Gentian, and Aristolochy, of each seven ounces; Germander nine ounces, and make a Powder.

Donzellinus his Powder is as followeth:

Take Germander, Groundpine, both the Centauries (or only the lesser) Marjoram, Sage, Betony, Gentian, and Birthwort, of each one ounce: the best Guajacum eight ounces or one pound: and make a Powder.

And by this one Remedy alone *Donzellinus* writeth that the Gout may be perfectly cured, provided that a man live not like unto a *Sardanapalus*.

Crato his Powder is this.

Take Aristolochy one ounce, Centanry the less three drams; Gentian six drams; Spignel, five drams; St. Johns Wort, six drams, Parsley of Macedonia half an ounce, Agarick two drams, Rapontick, or (if that may not be had) Rheubarb one dram; and make a Powder.

a Powder. Or which he giveth in the morning two scruples in the Water of Groundpine, or Betony Water (with the Syrup of either of the two former) in January five daies, in February as many, in March two, in May three, in June one, in July two, in August one, in September, October, November, and December, two: but it matters not much if it be oftener taken; only as he saith it will be somewhat better to take it in the manner aforesaid.

This following is Doctor Manard his Powder.

Take Germander, Dittany of Crete, Groundpine or Herb Ivy, Roots of the greater Centaury, and round Aristolochy, of each two ounces: the inward Rinds of Walnuts one pound: make a Powder. The Dose is one dram for forty daies.

This Powder next following is attributed unto Erasius.

Take Harts-horn burnt, Beef bones burnt, the Kernels of the Citron, Dates, Jaws of the Luce-fish or Pike, equal parts: burnt Coral, and burnt Ivory, of each half parts: make hereof a Powder. Unto which (for the taste sake) you may add a little Cinnamon, Mace, and Cloves; and with Sugar make a Powder.

Johannes Anglicus greatly commendeth this Powder, which he calleth the Sarracenick Powder: The Sarracenick Powder

Take Herb Ivy or Groundpine one ounce: the bones of man or woman burnt two drams: Liquoris three drams: make a Powder.

And yet nevertheless the sick person is not strictly and precisely to be tyed unto any forms of Pouders; but of the same simple Medicaments there may with Sugar or some convenient Syrup be made Electuaries or Pills (which for the most part are very fitly made up with Turpentine of Cyprus, since that most of those that are troubled with the Gout, are likewise obnoxious and subject unto the Stone) or Extracts, or those Medicaments they call Essences, or liquid Extracts, or a Wine, or a Medicate Drink; that so in this manner also the palate of the sick person may be pleased.

Antonius Gallus (a Physitian sometimes of Paris) greatly commendeth this Electuary:

Take Valerian one dram: Agarick two drams: Spignel three drams: Macedonian Parsley seed four drams: St. Johns wort five drams: Gentian six drams: Birthwort seven drams: the lesser Centaury eight drams: Groundpine nine drams: Mans bones taken out of the Joynts, and moderately dried ten drams: with Oximel Stillitick as much as will suffice make an Electuary: the Dose whereof is one dram for a whol yeer together.

Or,

Take the Conserve of Germander three ounces: of Herb Ivy, and Betony Leaves, of each one ounce and half: Seeds of St. Johns wort, Roots of round Aristolochy, of each half an ounce; Angelica two drams: the bones of a Man prepared, red Corals prepared, Ivory prepared, of each one dram: Cloves and Cinnamon, of each two drams: and with the Syrup of Betony make an Electuary.

And we may likewise add the Medicaments of latter Physitians, viz. their Magisteria, their Feculæ, and their Salts; as also Margarites, and Crabs Eyes. As,

Take Roots of Spignel or Masterwort, St. Johns wort, of each one ounce: the Feculæ of Cuckowpint two drams: the Salt of Groundpine, of Germander, of Cherfoyl, and of Masterwort, of each one scruple: Magistery of Corals, and Crabs Eyes, of each half a dram: Margarites one scruple: Sugar as much in weight as all of them: and make a Powder.

For the causing and provoking morning sweats there are also given Syrups of the Berries of Eldern prepared with Sugar two spoonfuls; and if you please there may likewise a little Harts-horn be added.

Crato commendeth this Distillation, of which one spoonful is to be taken every day in week once, if not oftener.

Take Balm, Valerian, Juniper Berries, of each what you think fit; Let them be sprinkled with good sweet Wine; then macerated in Balm Water, and afterwards distilled.

And in cold Bodies there may also very conveniently be used that *Aqua vite* which Gilbertus Horstius Hollandus, once a famous Physician at Rome, made frequent use of; and it is thus prepared.

Take Rosemary flowers, the lesser Centaury, Camomile flowers; Groundpine, St. Johns wort, Germander, Asarabacca, of each one ounce; the Rinde of Dwarf-Elder Root one handful, Orace one ounce; Treacle half an ounce; Cinnamon, Nutmeg, Ga-
Gilbertus
Horstius
his Aqua
vite
lingal,

lingal, Mace, and Ginger; of each one dram and half; Hermodactyls; and Aloes Hepatick, of each one dram; Agarick half an ounce; Coloquintida three drams; all the Myrobalans, of each two drams, Roots of Polypody of the Oak one ounce and half; Leaves of Choyce Sene, one ounce; Seeds of Anise, Dauk, and Fenel, of each one dram; infuse them in the spirit of Wine, (that so the said spirit may lie a fingers breadth above them) for two daies space; and then let them be afterwards destilled in Balneo Mariæ. Of this Water he gave unto such as had the Gout, from one ounce to three ounces, in the morning.

The Decoction of Ground pine:

But now in the Judgment of very many the Decoction of Groundpine may serve in stead of all the aforesaid Medicaments, and will do better than any one of them; and therefore it was likewise highly commended unto the Emperor *Charles* the fifth by the Physitians of *Genoa*: and *Solenander* in his fifth *Señt. Consil.* 1. tells us, that it hath been found by experience, that very many which had drunk of this Decoction for the space of threescore daies, have been wholly freed from the Gout, and restored unto their healths; whereas before they had both the Joynts of their hands, and of their feet also grievously afflicted and tortured by this Disease. And no wonder, for it attenuateth the thick Humors, and consumeth them; driveth forth the Excrements by Urine, or else by sweat evidently; or else it insensibly discusseth them by transpiration: and it strengtheneth also all the internal bowels, and every kind of Nerve, yea and the whole habit of the Body. But because that *Vesalius* writeth so largely and fully touching this Decoction of Groundpine, and the advice given by the Physitians of *Genoa* (as we may see in his Epistle to *Joachimus Rœlandus*, touching the China Root, about the end thereof) We think it not amiss, neither our time ill spent, to give you his words at large, as we find them in the said Epistle. No man (saith he) can blame me for administering at a fit and convenient time that Medicament which I find commended by the prime *Genoa* Physitians, as divine, and as if it were some Deity; and which (with the greatest promises that might be of the perpetual banishment of the Articular Disease) was some months since sent unto Doctor *Marsilius Colla*, (Master of the Horse to the Emperour, and one that for his many extraordinary parts, and endowments of mind, is worthy of more health then what at present he enjoyeth;) and now again also so brought unto *Cæsar*, that for the future we may most certainly conclude, and promise him, that he shal never more hence forward be troubled with the pain in his Joynts, if he please but to make use of this Medicaments. Now in very truth the whole description hereof is sufficiently Empirical, and containeth in it nothing else but that at the first, and in the very beginning of the Malady, a purgation is to be administred; and then afterwards, the Leaves of Groundpine (some call it Herb Ivy, or the little and low Oak) be cut in pieces whilst they be yet green, if they may then be had, (but I for my own part would rather have it dry; and as in all other Herbs that have in them a faculty of drying, I prefer it before that which is green and newly gathered) and then boiled in white wine; and of this Decoction one Cup given in the morning, three hours before dinner: although in the mean time how-ever it be added, that the longer before dinner the Decoction aforesaid be taken and drunk, so much the more benefit is to be expected from it. In reference to the course of Dyet, whosoever maketh use hereof must abstain from all meats that are sharp, sour, and Salt; and the drinking of that Wine is prescribed for sixty daies, with this addition, that the distilled Liquor, or Water of the aforesaid Herb, will add and confer much unto the strength of the said wine, (which seemeth unto me very ridiculous;) and that therefore for such as are not pleased with the Decoction, they are to have the Water given them. As for any thing else, we find nothing in the whole sheet sent hither unto us, besides a great and swelling Title, and a large Catalogue underneath of those persons who by the use thereof lived free from the Disease of the Joynts, for some years, and of such as made use thereof when it was sent unto them; in which Catalogue we find Cardinal *Doria's* to be the first, and foremost. Thus far *Vesalius*. From whose words it evidently appeareth, that he himself gave not his full consent unto the praise and commendation of this Decoction. And very credible it is, that it did not benefit all that drank it: and yet notwithstanding if we shall well weigh the virtues thereof (as they are before propounded) it wil from thence manifestly appear, that it is indeed a very excellent and precious Remedy in the Gout. But this *Vesalius* rightly tells us, and gives us notice of it, that the distilled Water cannot (in probability) add any thing unto the Decoction, in regard that the distilled Waters (as many falsely think) have not all the

the faculties and virtues of the simple ; for all the parts thereof are not elevated into the Alembick.

But now this Herb *Ground-pine* may be drawn into use many several waies. Some take a pottle of *Rhenish Wine*, the purest *Water* one pint, *Hony* of *Roses*, the fourth or sixth part of a quart. Boyl all upon the Coals in an Earthen Vessel, and scum them : then add of *Ground-Pine* four handfuls, *Germander* two handfuls ; *Tears Ears* or *French Cowslips*, one handful ; boyl them in a double Vessel for three hours.

Others take of *Groundpine* gathered when it first beginneth to flourish, and well kept, one handful ; *Wine* three pints ; boyl them in a double Vessel five hours, and then strain them.

But it were far better ; if the Herb aforesaid were tuncd up with the new *Wine*, and there let lie ; that so in this manner a *Chamadryte Wine* may be provided, without any boyling at all.

And if any fear the *Wine*, he may in the like manner prepare an *Hydromel*, or a *Chamadryte beer* likewise.

Now the use of this *Wine* is to be continued (and so likewise of the *Hydromel*, or the *Beer*) for threescore daies, the Body being first well purged ; and every day during the time one draught is to be taken in the morning.

And the like may also be made of the *Essence* of *Ground-pine* (as they call it) and this must be made use of for many daies.

But it is not here my meaning that any should be kept and held unto certain forms ; but I would have those Medicaments to be made up, and compounded, according as occasion and the Constitution of the sick person shall require. The chief and principal *Simples* out of which these Medicaments are compounded (as appeareth by the forms hitherto prescribed) are, *Germander*, most useful in all the Affeats of the Joynts, (and therefore by some it is also called the *Arthretick* or *Gout Ivy*) and *Lobelius* of one dram hereof with *Turpentine* maketh Pills, and greatly commendeth them in all Gouts whatsoever ; and then in the next place, *Groundpine*, of the Virtues whereof we have before spoken ; *St. Johns wort*, *Round* and *long Aristolochy*, the lesser *Centaury*, the true *Rhapontick*, *Gentian*, *Spignel* ; and the *Root* of *Mugwort*, if in stead of the *Parsley Roots* it be boyled with meat, (by the use of which alone many have been freed from the pains of the joynts, as *Abraham Seylerus* writeth in *Scholtzius* his *Consilia*, *Consil.* 335.) unto which may be added the *Bones* of a *Man*, *Coral*, *Crabs Eyes*, with the rest that have been already mentioned, according to every ones constitution.

For *Aetius* doth here rightly admonish us, as touching Treacle, and the like hot Medicaments, that they do not only not benefit those that are of a more hot Constitution and temperament ; but that they likewise oftentimes produce Resolutions that prove incurable. But here indeed there are some that determine this to be understood only of such as are hot in the highest degree ; because that *Galen* also (in his fifth Book of the preservation of health,) expounding the words of *Hippocrates*, (in which he forbiddeth the drinking of *Wine* unto those that are hot,) writeth, that this is not intended of all absolutely that are hot, but that *Hippocrates* spake it of such as were hot in the highest degree : but yet most certain it is, that great heed is here to be taken unto the diversity of Bodies and temperaments ; and that hot Medicaments are more conveniently also given in *Autumn*, then in the spring time ; and therefore in Bodies that are more hot *Succory* is wont to be intermingled with the Medicament : and as touching *Succory*, *Adrian Spigelinus* likewise writeth, that he had been taught by experience, how that in a hot Cause there was nothing more convenient then the Leaves of *Wild Succory*, gathered in the month of *May*, and dried in the shade, and then given one dram thereof, for the Dose. And yet nevertheless the *Roots* of the said *Succory* are likewise very useful, if they be pulled up in the first beginning of the Spring ; and the same may also as well as the Leaves be mingled together with those other Medicaments that we mentioned before.

But now in what manner these pouders and *Artipodagricks* Medicaments (commonly called Antidotes) do benefit those that are troubled with the Gout, is well worth our consideration ; and as touching this very thing *Thomas Brasus* moveth a Question ;

How the
Antipoda-
grick Me-
dicaments
do benefit
such as
have the
Gout.

Question; which is this, viz. how those Medicaments can correct the cold and moist distemper of the Head, or dissipate humors bred therein. But the truth is, he moveth this Question out of an Anticipated Opinion and Hypothesis, whiles he presupposeth that the humors (the Cause of the Gout) do fall down out of the Head; which that it is false, we shal anon shew you in the seventh Question. Whosoever be that rightly understandeth the Cause of the Gout may easily perceive what the Physicians main scope is here in the administering of the Antidotes. For seeing that those Tartarous humors are generated in the first and second Concoction, and then are derived into the Veins, and at length in their own time thrust forth into the Joynts; in the administering of the Medicaments the scope that the Physician here propoundeth unto himself is this, to wit, that he may promote and help forward the Concoctions of the Stomack and Liver; and if there be any excrements generated in the Stomack (as *Erastus* also confesseth that there are) and in the parts neer adjoyning (to wit, the Meseraick Veins, the Spleen, and the Liver) these do cleanse them away, consume them and dissolve them into exhalations, and evacuate them by Sweats, and Urines: and *Carolus Piso* writeth most truly, that the pores and breathing places of the Skin (whether sensible, or else even insensible) is so greatly to be accounted of, that in it alone there seemeth to be placed the whol business of preventing all kind of Arthritick fluxions. And this is excellently done by those Medicaments, if they be continued.

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But now here it may (not without Cause) be demanded, whether or no the very same may not be performed by the Decoction of Guajacum Wood, Sarsaparilla, China, and the like; seeing that even those also do exceedingly provoke Sweats; whereupon the use of these Decoctions is by many prescribed in this Disease of the Gout. But yet leaving every man to enjoy his own Opinion, for my own part I am altogether unsatisfied in this point. For (as *Crato* saith truly in his 25. Epist.) those Sudorifiques (especially such as are made of Guajacum Wood) if they be frequently administred, do very much consume and wast the Radical moisture, which is not in the least done by any of the afore cited Medicaments; which do only cleanse the humors, and discuss them by a moistness and dewiness all the Body over in the morning, or by a gentle and light Sweat, or else also disperse them insensibly. And besides, such Decoctions as these when they are taken in a great quantity do very much dry the Bowels, which of themselves are for the most part over dry in those that are afflicted with this Malady. Add to this, that those Antipodagricks Medicaments before spoken of are most of them bitter; and thereupon they obtain a virtue and power of cleansing away those tartarous humors, and Cholerick Ichores that are collected about the Liver and Spleen; which virtue and faculty these Decoctions last mentioned do want; since they do only extenuate, dry, scatter the humors, and provoke Sweats. And hence it is, that *Johannes Crato* (in his 253. Consil.) not without good Cause tels us, that to follow the Vulgar Opinion is no less to be deceived, than by placing any hopes and expectation in those potions of China, Sarsaparilla, and the like Decoctions. For if they at any time seem to benefit, and yield any help, this they do by means of the exact and strict Dyet that is then observed: and the most of those Persons of quality that have so often drunk those Decoctions have been greatly deceived by the persuasions of others, and therefore they may do wel to see to it, that they may stumble no more at the same Stone. And therefore at all times if there be any vitious Constitution in the Bowels, and a power generating that humor, we ought carefully to look to it, lest that by the use of such like Medicaments that aforesaid power should be augmented; as it is most certain, that that disposition unto the Stone that is in the Reins may be greatly increased by hot and dry Medicaments unseasonably given to break the Stone. And *Monardus* likewise (in the 16. B. of his Epistles) writeth that Guajacum doth wonderfully dry; and therefore must needs be very hurtful for such as are of a dry temperature.

The Chymists do here likewise commend their Medicaments: and some of them write, that the Arcanum or Secret of Tartar doth remove, and by the very Roots take away the Gout: Now it is made in this manner.

The Ar-
canum of
Tartar.

Take Salt of Tartar depurated, or purified; from this draw away a distilled Vinegar, again and again (always receiving the new) until such time as it leave behind it no more at all of its sharpness and Tartar. And then unto one part of this Salt add three parts of common Bole, and so distill from thence the Spirit by a Retort of Glass wel Luted, and sitting thereunto a Vessel to receive, and let this be big enough. Unto one part of this Spirit pour in two parts of the Spirit of Wine, an eighth part of the Oyl of Sulphur; and a sixteenth part of the Oyl of red Vitriol. All of these being wel mingled together in a Glass Sealed after the Hermetick manner, let them for three months be continually circulated.

Fryar

Fryar Basil Valentine doth with great Praises extol the Spirit of quick or unslaked Lime. But as the Composition of this is very difficult and troublesome; 1^o we have likewise just Cause to fear, and wel to consider, whether or no it doth not easily offend the Bowels; seeing that there is in the Salt of quick Lime a notable and manifest Caustick quality; which appeareth even by the potential Cauteries that are made out of the Ley that cometh from the said unslaked Lime.

The Spirit
of quick
Lime.

And so indeed Issues do likewise dayly evacuate some of the ferous humor, or a certain kind of Sanies, and thin Excrement: but Experience doth testifie, that this Remedy is not in the least to be compared with Sweats and insensible transpiration: and it is wel known that many have had some of these Issues made, and yet nevertheless they have been afflicted with the Gout, in regard that they are not sufficient to draw forth that whol humor that is in the Vessels; and much less can they evacuate that which is from day to day collected about the Bowels, and is afterwards by the Veins poured forth into the Joynts; and especially if there be committed any errors in the Course of Dyet; and chiefly if there be an excess in Drinking.

Issues.

But yet nevertheless, if the Gout hath its Original from some old and long continued Ulcer that is consolidated in the Thighs, and the suppressed Evacuation of the Ichor that was wont to flow forth thereby, then in this case it wil not be amiss, but to very good purpose to make an Issue in the Thigh. And so likewise, if upon sudden stopping and healing of an Issue in the Arm there happen any fits of the Gout to arise, the Issue is then again to be opened.

What things they are that strengthen the Joynts.

The third head of preventing the Gout consisteth in the strengthening of the Joynts (as most Physitians tell us) that so they may not too readily and easily receive the humor flowing unto them. But *Carolus Piso* (as we likewise told you above) thinks that here in this thing much pains may be taken to little or no purpose, it being not within our power (would we never so fain) since that as he conceiveth, that weakness doth not consist in any distemper, or hollownes, and loosness, but in the Natural conformation, and termination of the Vessels into the extreame Joynts. And although that even by this means also we may hinder and prevent that humor from flowing into the Joynts: yet he determineth that the sick Person is so far from receiving any benefit from hence, that he may also by this means be brought into great peril and hazard of his life, the matter being translated unto the Lungs, or some other noble Bowel. But in very good earnest, it is not a thing to be sleighted and nothing accounted of, that the humors chiefly flow into the Joynts, in regard that the Vessels are terminated into them: and if the matter that was wont to flow into the Joynts be transferred into the more noble Membets, the sick Person may then be cast into great dangers; and as we told you above (among the Prognosticks) it is a very ill sign, if the matter that was wont to flow unto the Joynts subsist and abide stil in the Body. And therefore we are not wholly to rest and confide in this Remedy, or manner of preventing the Gout; without using the utmost of our endeavor that those vicious humors may not be generated in the Body; or if they be already bred there, that they may be frequently evacuated. And yet however this is also a certain Truth, that if the Joynts be weak and ill disposed, the sick Persons are then the more frequently troubled with the fits, and not so easily freed from them. But now, in what this weakness of the Joynts especially consisteth, we have shewn you above; and we shal likewise shew you further in the eighth Question. And therefore if there be any thing in the Joynts, either left there after the Paroxysm, or collected from some vicious Nutri-ment, it is to be consumed; and so the Joynt hath its own Constitution and Natural temperament restored; and thus it is said to be strengthened. And therefore the Medicaments that are here useful must be Astringent, and moderately heating and drying. And yet notwithstanding such Medicaments as these are not to be administered, until al the pain and swelling be wholly vanished, and that the hard knobs likewise disappear. For whilest these are in being, Astringents do more hurt than good, in regard that they drive the humor into the part affected, and there harden it.

The third
Member of
preserva-
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strengthen-
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Joynts:
whether
it be neces-
sary, or
not?

But now for the strengthening of the Joynts, and the consuming of the Reliques of the humors that are in them, the use of Grape Kernels is by many commended, as that which affordeth much benefit; touching which since that *Antonius Donatus ab altomari* hath written a whol Book, the Reader may consult the same (if he please) for his further satisfaction. This only we shal desire him to take notice of, that they are most conveniently used in the Vintage time, while they are new, and they must be such as are taken out of Grapes that are

The bene-
fit arising
from
Grape
Kernels, in
the streng-
thening of
the Joynts.

thoroughly ripe : of the which seeing that in many places there is no great store, other Medicaments may be made use of instead of them. Yet notwithstanding there are some that likewise use these Grape-stones dried ; and they boyl them in red Wine and Water ; and while they are boyling, they add to them Sage, Betony, Germander, Printrose, and other such like Herbs ; as also Earth-worms.

Baths
strengthening the
Joynts.

Baths do likewise corroborate the Joynts. For although they be by some rejected, in regard that by their actual humidity and heat they attract the humors unto the feet ; yet nevertheless this inconvenience may easily be prevented, if Plants that heat and dry, and strengthen the feet, be boyled in the Water ; such as are Betony, Sage, Germander, Roses, Cranesbil, Heath, Oak Leaves, the Wood and berries of Juniper, and the Fruit of the Mountain or wild Pine-tree.

Andemacrus his washing of the Feet (which as he writeth, hath profited many that have made trial thereof) is in this manner :

Take Lye made of the Ashes of the Beech, which is to be strained three or four times ; and then add thereto as much Wine, and Allum two ounces ; and heat them at the fire.

Or,
Take Mugwort, Wormwood, Organy, and Camomile flowers, of each two handfuls : Allum, and Salt, of each one handful : Lye of the ashes of Beech, as much as will suffice ; and boyl them together for a bath.

And so likewise for the strengthening of the Joynts, very good and useful is a Bath of Juniper Wood, if the branches thereof be boyled in Chalybeat Water, until the Water be dyed and colored thereby, and hath even gotten the color of the Lye. And yet nevertheless there may also be added some ounces of Salt or Allum.

After the Bath the Joynts are to be anointed with the Oyl that is pressed forth out of the Grape Kernels, or the Oyl of Myrtle, or Roses, or some other such Oyl ; touching which more anon.

Hot baths
strengthen
the Joynts

But hot Baths are by many most especially commended, although they be disallowed of by others ; of which we shal speak further in the twelfth Question. And so likewise the Baths that proceed from Sulphur, Salt, Nitre, Vitriol, (and partly also Baths of Allum Water) are very useful if they be made use of in a due and right manner. For if the Allum abound, the Baths are then to be made use of with great Caution, in regard that they shut the pores of the Body, and render it unfit to sweat, a thing altogether necessary in such as are troubled with the Gout ; and if there remain any thing in the part affected which may exhale, and be dispersed by insensible transpiration, they thrust this forth unto the Nervous and Membranous parts, and so renew the pain ; the same that happened to *Fabricius* in his 5. Century, *Observat.* 83. Among the rest, the *Hirschergerian*, and *Laudeccensian* hot Baths in *Silesia*, the *Caroline* in *Bobemia*, the *Badensian* in *Austria*, the *Martiate* (now called the *Wisbadensian* baths) the baths not far from *Menix*, and those likewise at *Emser* upon the River *Lanus*, as also those of *Aquisgran* are all of them very useful for those that have the Gout. But the Dirt or Clay of some certain Baths is chiefly to be made use of for the wasting away of the matter that sticketh in these parts, and strengtheneth the said parts.

Where such baths are wanting, Fomentations and artificial baths may be made. The Lotions or washings of Allum Water are very much commended ; but yet it is far better that there be Salt and Sulphur added unto the Allum, that so if there be yet any of the matter left behind, it may be resolved. Or,

Take Flowers of Arabian Orrace, of Sage, Thyme, Cranesbil, of each one handful ; boyl them in common Water, or (which is better) in Water wherein Iron hath been oft-times quenched : and to the straining add Sulphur and Nitre, of each two ounces ; Allum one ounce : Let them be boyled again, and the parts fomented with the Decoction.

Or,
Take Leaves of Germander, and Betony, of each one handful : Flowers of wild Roses, Arabian Orrace, Bears Ears or French Cowslips, the common Doves foot, of each two handfuls ; white Vitriol one ounce : boyl them for a Fomentation or a Bath.

Unguent
and Em-
plasters

But the most ordinary and usual Remedy (that is made use of by many) is the Unguent we mentioned also before, where we spake of the Cure ; which is made of Salt corrected or dried to a poudre (others are rather for the Salt of Juniper) and a sufficient quantity of common Oyl, or Oyl of Roses, mingled into the form of an Unguent, with which the Joynts are to be wel rubbed.

Solenander maketh use of this Liniment after the Lotions.

Take

Take Oyl Omphacine two ounces; Oyl of Mastich one ounce; Salt dried to a powder two drams; Bole Armenick three drams; Dragons blood, and Hypocistis, Frankincense, and Mastich, of each two drams and half. Let every one of these be first beaten into a fine Powder by themselves: and then let them be mingled together with the Oyls in a Mortar into the form of a Liniment.

The Emplaster Diachalciteos, or as some call it, the Emplaster Diapalma, laid on, is here likewise very useful. And this Emplaster is fit and proper in all the Joynts, whatsoever the humor be that floweth unto them. And Solenander in his 4. Sect. Consil. 25. writeth, That he knew divers, who before were wont very frequently to be troubled with fits of the Gout, that by the continual use of this Emplaster, and by taking Purges now and then, were for the space of five whole yeers freed from those pains. And this Emplaster it, neither defileth the part whereon it is laid, neither doth it cause any itch, or raise pushes; nor is it at all offensive, either in its smell or any other quality. Now it is fitted to the form of the Member. In the Feet shoes are made of thin Leather (but the Fox skin is more approved of) which within are to be covered over with the Emplaster Diachalcitis, and so they are fitted to the feet. The same Leather spread over with this Emplaster may be applied unto the Knees, Hand-wrists, and other parts. And Linnen Socks likewise washed in Wine with Water, then dried, and drawn upon the Feet, are very useful and convenient.

Thomas Erastus commendeth the Sand stone (the Latin Physicians call it *Lapis Sabuli*) if it be mingled with the Oyl of Myrtle, and Gentian Roots reduced into a Powder, and laid on in the form of a Cataplasm. But yet the same Erastus adviseth us not to use it until it shall manifestly appear that there is no Excrement remaining in the Joynts, that may be hardened into a Tophus. And therefore he perswadeth us first of all (before we use it) to lay on once or twice the Cerote of Briony, described by Aetius (tetrab. 3. Serm. 4. chapt. 43.) that so there may be the less danger; and this Aetius very much commendeth.

But now as touching all manner of Topicks for the strengthening of the feet, this is to be observed, that for such as will keep no orderly nor regular course of Diet, neither use convenient purgations, and other evacuations, these Topicks if they be administered, it will be without any benefit at all, yea, oftentimes to their great detriment and hurt: but unto such as live temperately, and use fit and proper Evacuations, they are administered with singular benefit and success.

Aetius (in the place alleadged, Chap. 24.) for the preventing of the Gout, commendeth also the cutting forth of the Veins that are from the superior parts carried down into the feet, ^{Cutting out of the Veins} done after the same manner as the Varices or crooked Veins in the Thighs are sometimes wont to be cut forth. But as Hieronymus Fabricius ab Aquapendente tells us rightly (in his B. of Chirurgical Operations) the extraction and excision of the Varices is not only harsh and difficult; but that for the most part also it succeedeth unhappily, by reason of the blood flowing out. And moreover, from this cutting forth of the Veins the lower parts are soon brought into a wasting and withering condition. And besides all this, although these Veins be cut forth; yet there is but very little benefit to be expected from thence. For if vicious Humors be heaped up in the Body, and be accustomed to flow unto the feet, their way and passage being shut up, they are carried unto some noble part, and there they may excite some other affect far more dangerous.

There may likewise, for the strengthening of the Joynts, internal Medicaments be administered; to wit, those which are appropriate unto them, as Germander, Ground-pine, or Herb Ivy, Betony, Primrose, Sage, Rosemary, and others of this kind, as we mentioned them before.

And this is the way and means to prevent the Gout; as Rhases seems in few words to comprise it, whilst he thus writeth: If the person troubled with the Gout shall observe a good and orderly course of Diet, and govern himself as he ought in the six things not Natural, and shall sometimes use Mithridate, or something else that may consume all the superfluities, and shall likewise make use of Stipicks about the place of the Joynts, this person shall be relieved.

Chap. 8. The Physitians Consolation in the Gout.

IN regard that such as are sick and diseased desire and expect from the Physician, not ^{comforting} Consolation, but ^{the patient} advice, and the best of his assistance; it may seem to be besides the ^{in the gout} Office

Office and business of the Physician to write any thing touching Consolation in the Gout: and indeed I should not at all have published any thing of this Nature, had I not found the same done by that famous and most eminent Man *Johannes Crato*, my fellow Citizen, and Physician unto three Emperors, in his *Consil.* collected by *Scholtzius*. Him therefore I now shal follow, and speak something as touching the subject aforesaid. For oftentimes indeed Medicaments and helps of all sorts are administered unto the sick person, and yet nevertheless the Physician doth not so obtain what he desireth. And sometimes likewise the sick party (either in respect of the condition of his life, and imployment; or else also in regard of some other parts of his body) cannot so exactly as he ought observe what is enjoined him by the Physician; and therefore albeit the sick person cannot then conceive any hopes of a perfect Cure, yet notwithstanding he may have something to comfort himself withal.

I. First of all therefore, The Gout preserveth from many other Diseases and Maladies, and it is a sure sign of the strength of Nature; which driveth forth the vitious humors in the body, out of the high way, and common road (as I may term it) or (if you wil) the principal passages, unto the extreame and more ignoble parts of the body; and on the contrary (as we likewise acquainted you before in the Prognosticks) if Nature be weak, and sink under the burden, as being no longer able to expel forth these humors, then Feavers and other dangerous Diseases are wont to follow. And hence it is that Physicians (and some of them of great note) are of Opinion that the Gout many times maketh for the lengthening of the life; and that if it be ill cured it hasteneth on death. For Nature (as we said erewhile) driveth the vitious humors unto the Joynts. But if (the body being not sufficiently purged, or when there is no exact course of Dyet observed, or by reason of the long continuance of the disease, or else by reason of age) the strength be weak, and the Physician shal then busie himself only in strengthening of the Joynts, it may easily happen that the matter which Nature was wont to thrust forth unto the Joynts, if it be stil retained in the body may be turned unto the principal parts, and so may excite dangerous Diseases, yea, and hasten on death.

II. A man all the while he is troubled with the Gout is in no danger of his life (as in other diseases he might be, to wit, burning Feavers, and others, spitting of blood, the Pleurisie, Impostumation of the Lungs, Dropsie, Epilepsie, Apoplexy, and many other), but after a short time the Man returneth unto his wonted imployments, and is oftentimes so well recovered, that there is not the least appearance of his being sick.

III. If likewise there be any thing in the World that may perswade Man unto temperance and sobriety, the Gout chiefly doth this. For whenas the pain in the Gout is most raging and intollerable, and that the Gout cannot by any thing be better prevented or mitigated, than by a frugal Dyet (and in this we find all Physicians to agree, and we have also a testimony of it from Experience it self) which causeth that not only no matter may be supplied for the encrease of the ill humors; but it likewise best of all correcteth the distempers of the Bowels: and it is the part of a prudent man rather to obey Reason than his Affections, and not to forget that of the Poet.

Pleasure with pain

Is loss, not gain.

and he ought to consider likewise that that pleasure which he taketh in a more free and liberal Dyet, is not worth, neither wil it compensate those so great pains and wrackings that must be endured in the fits of the Gout. And although it seem indeed somewhat grievous to shun all feasting, and company-keeping, yet this must be thought of, That none of those boon Companions can afterwards afford any the least help in this Disease; but that (as *Lucian* hath it in his *Tragopodagra*, about the end thereof) they wil rather laugh at, and deride a man in his pain and misery. Yea, moreover, whilst that for fear of the Gout a man accustometh himself unto a good and orderly Dyet; he doth not only prevent the pains of the Gout, but he avoideth likewise many other Diseases that proceed from the Errors in the Dyet; and a Man hereby oftentimes attaineth unto old Age. But as for such as either wil not submit themselves unto the Rules of Dyet, or else by reason of the condition of life and imployment cannot observe the same, let not these accuse either the Physician, or the Physick, but let them blame themselves, since that (as *Galen* writeth most truly in his Tract of Curing by letting blood, Chap. 7.) To prescribe Medicaments (saith he) unto that party which neither can, nor will observe an orderly and due course of Dyet, is altogether in vain, and to no purpose. But now if a man observe a good Dyet, although he be not wholly freed from this Disease, he yet may then comfort himself in a good conscience,

and rest himself contented in the will and good pleasure of God. And hence it is, that Crato, in the place alleadged, writeth, that seeing diligent observation and prudent moderation in point of Diet hath been found to be alwaies helpful, and that it never hurteth or deceiveth any, to neglect it therefore may well be thought not only an Argument of the greatest folly and madness, but likewise of their neglecting and being careless of themselves, which Piety forbiddeth. And when we have the Testimony of our own conscience, that nothing hath been done by our own fault that might bring or increase the pain; it is then a very great Consolation, when we can perswade our selves that we are altogether blameless; and so can cheerfully endeavour in a right manner to bear what is necessary and could not be avoyded, and not to repine and murmur against God.

I V. And this also may comfort such as are afflicted with the Gout, that as every one hath his proper Calamity; so likewise every man hath a Commodity properly belonging to him; and that the Gout is said to be the Rich mans Disease. For although those that are troubled with the Gout do indeed suffer a great pain: yet most of them are such as have a plentiful Estate, or at least they have what is sufficient; whereas on the Contrary, there are many who although they be free from this pain, yet they lie under other daily pressures and grievances, by Reason of their poverty. The Gout (as Cardanus in his *Encomium of the Gout* writeth) smelleth and is sensible of sweet Unguents, heareth Songs and Musick, lyeth (proud as it is) in soft beds, upon Silken Pillows, betwixt Gold, and Pearls, and painred Tables, heareth Tales and pleasant stories, tasteth generous and Rich Wines, and the more delicate and dainty kind of Meats. It hath presented unto it pleasant and delightful flowers, Embroydered garments, and whatsoever hath ambitiously for many years been heaped up by wealthy Citizens, or even by Kings themselves. And the Gout is so far blessed, that he who is detained thereby, besides the pain it self, hath nothing to hinder him from living a happy life.

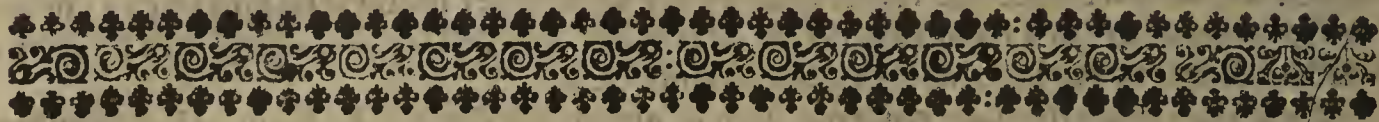
V. Those that are troubled with the Gout may likewise comfort themselves with this, that those higher faculties of their Souls and the operations of their minds are not corrupted and hurt in this as they are in most of the other Diseases; but for the most part these continue safe and sound. And the very truth is that for most of the Monuments of the Learned, we owe them unto the Gout; for had these men alwaies had their health, they had never published so many voluminous and learned works. And (as Cardanus in the place alleadged writeth) Erasmus, a man of extraordinary great parts and learning, in our own age, while he lay diseased of the Gout, and by Reason of it kept his bed, wrote and published whatsoever of his is worth our reading.

VI. There is likewise another great benefit and commodity that the Gout bringeth along with it, to wit, that it freeth a man oftentimes from many other troubles; and keeps off much Vain and fruitless labor, as also many grievous and disquieting Cares, (that I may use Cadans own words) so that if a man be required to serve a Tumultuous Common-wealth, or to give his attendance upon a pettish and froward Prince, or some imprudent friend, how can he better excuse himself, then by his having the Gout? He that hath the Gout hath the greatest part of the year at his own command: and there is no better nor honest excuse for ones self from work, then by the Gout. And when there is occasion of a mans going abroad in publick to serve his own turn, it is but saying, that the Gout hath left him.

VII. And Lastly, although by art, and a good course of Diet, much help may be hoped for; yet nevertheless in regard that the temper of the Bowels by the long continuance and grievousness of the pains is so subverted, and the Joynts so weakened, that there is no hopes left remaining of a perfect recovery of the health, the sick person may yet in the meantime enjoy those benefits and comforts that we have mentioned, and with Patience establish his mind, after the example of that great Emperour Charles the fifth, who was wont to say, that to be Patient, and not much to complain and cry out by Reason of the pain, are the best Remedies against the Gout.

But seeing that it is not the part of a Physitian, (but a thing much unbeseeming him) to make himself merry with the Disease and pains of his Patient, I shall forbear to add any thing more of this Nature. But if there be any one that desireth to know

know any Elegant and conceited Jest upon the Gout, let him read *Lucian* his *Tragopodagra*. Which is likewise wel worth the Physicians reading, since that it doth most emphatically express the vehemency of this Disease, and shew the Cause thereof (and that indeed more rightly then many Physicians) and Elegantly describe the time of its invading the person, the difficulty of its Cure, the bragging and vain promises of Empericks, and lastly the Patience that is necessary and Requisite for the sick Person.



QUESTIONS

Controverted

Touching the Gout.

Question, 1. Whether the Name of Arthritis, or the Gout, Comprehend likewise the Gout Podagra, Chiragra, and the rest of the pains in the Joynts?

WE have told you before that *Arthritis* is so called by the Greeks from *Arthron* (signifying a Joynt) and that therefore it very fitly agreeth with all the pains of the Joynts, (of which we have hitherto spoken,) but by the Barbarous and common Practitioners it is called also *Gutta*, but not so properly. And yet notwithstanding there are some even of the latter Physicians (and among the rest, *Franciscus India*, one of the Physicians of *Verona* a City in *Venice*, in his first B. of *Gutta Podagrica*, Chap. 1.) who deny this Name of *Gutta* to be Barbarous and improper, it being as it were the general Name for all Diseases which by destillation are produced in the Joynts of the Feet, Hands, Hips, and the like parts of the Body, and that therefore it deserveth to be the general Name; but they write that *Arthritis* cannot properly be applied as a general Name unto the Gout *Podagra*; because that *Galen* tells us (in the Sixth Section of the Aphorism. Aphorism. 28.) that almost all those that are troubled with the pains of the Joynts are first of all taken with the Gout. And there are likewise other Physicians that make the pain of the Joynts some other, and altogether distinct from the *Podagra* and the *Chiragra* Gout. *Cardanus* (in Aphorism. 29. of the Sixth Section) writeth, that the Disease of the Joynts and the *Podagra* are not one and the same Disease: and he addeth, that he had seen many Children that were troubled with the pains of the Joynts, but not one of them that had the Gout; and that he remembereth not that he had ever read any Author who had seen it; and he reprehendeth *Galen*, for that he maketh no difference between *Arthritis* and *Podagra*.

But *Luc. Mercatus* (in his fourth B. of the Curing of internal Diseases, Chap. 18.) handleth this same subject at large, and distinguisheth *Arthritis* or the Disease of the Joynts, from *Podagra*, *Chiragra*, and *Ischias* or the *Sciatica*; and he teacheth us that the *Arthritis* hath a Nature peculiar unto it self, which consisteth not in pain, but in this that it seizeth on all or most of the Joynts; as also that *Arthritis* doth not require that weakness of the Joynts which is necessary in *Podagra*, *Chiragra*, and *Ischias*; but that a far less imbecillity doth suffice: and on the contrary, that it requireth a far greater store of matter; and that it is much more rare then the Gouts, *Podagra*, *Chiragra*, and *Ischias* or the *Sciatick* Gout: and that *Arthritis* hath likewise this proper and peculiar unto it, that it beginneth with a swelling, and endeth in a pain; whereas in the *Podagra*, *Chiragra*, and *Ischias* the quite contrary happeneth; and the part is first of all taken with pain, and then afterward it swelleth:

swelleth: and moreover, that it doth not require forty daies space for its resolution, and that because the parts are less weak and infirm, and because that the Humor sticketh in those parts that are more fit for resolution: and Lastly, likewise, that it most seldom or never returneth, in regard that all the matter is dissolved, and wholly Rooted out; unless haply that by an intemperance and irregularity in the life, it collect a new fulness of matter. For he determineth that the cause of the *Arthritis* is peculiar, to wit, the internal, a fulness of the Vessels, and more especially of the blood; but the external is every occasion that bringeth labor and unwonted exercise to the Joynts, by the which they become hot, loosened, and dilated; and the Humors poured all abroad waxing hot, and stirr'd up and down flow together in these Joynts; which the part weakned and made loose doth very easily draw unto it, and receive it.

But (as for the opinion of *Franciscus India*) the very truth is, that the Word *Gutta* is a Latine Word, and not Barbarous; but yet to use it for a fluxion and Catarrh, or for *Arthritis*, is contrary to the use of the Latine Tongue; and therefore he may very deservedly be accounted for no better then Barbarous that shall use this word for *Arthritis*, or prefer it before the Word *Arthritis*. And although that *Galen* (in his sixth of the *Aphor.* and 28. *Apho*) doth indeed affirm, that almost all that are taken with the *Arthritick* affection (that is to say, the pain in the Joynts) are such as have first of all been troubled with the Gout, yet nevertheless this doth not prove, that the Name of *Arthritis* fitteth not unto every pain of the Joynts: for there are likewise Joynts in the Feet. And as we told you above (in the first Chapter) this Name in general is sometimes taken in special for that Disease of the Joynts, when all or most of the Joynts are affected; which happeneth not, unless a man be first taken with the Gout *Podagra*. But more rightly *Guainerius* (in his *Treatise of the Diseases of the Joynts*, Chap. 1.) I (saith he) when I saw that the *Arthetica* (for so all the Physicians of that Age by Reason of their ignorance of the Greek Tongue called this Disease) had its Name from a Limb or Joynt, (in which places the pains of the Joynts are wont to be) was willing to call all such like pains (whether with a swelling, or without) *Arthetick*, like as also all that ever were before me have done.

But as for *Cardanus* and *Mercatus*, I see no cause at all why they will not have the Gouts, *Podagra*, *Chiragra*, *Gonagra*, and the Sciatick pain, and all other the pains of the Joynts, to be comprehended under the Name *Arthritis*, as a *Species* under its *Genus*; or if the most or all of the Joynts be troubled with the like affect with that wherewith the Feet, Hands, Knees, and Hip are wont to be grieved; I know no reason (saith he) why it may not be called *Arthritis*. But this in the mean while we deny not, that every Disease of the Joynts, or every swelling are not properly called *Arthritis*; and that it sometimes happeneth, that other vitious Humors, (and not the blood, as *Mercatus* will have it) altogether of another kind from those that produce *Arthritis* properly so called, may be heaped up in the Body; and that they may sometimes with, and sometimes without a feaver, be driven unto the parts nigh unto the Joynts, and may there excite and cause swellings, and sometimes also pains; which swellings notwithstanding are not properly the *Arthritis*, seeing that (as *Mercatus* himself hath determined) they do not begin from pain, and end in a swelling; but on the contrary, they begin with a swelling, and then afterwards there cometh a pain. How much less then are these swellings alone worthy of the Name of *Arthritis*; and on the contrary, this Name to be denied unto those pains of the Joynts; of which we have hitherto been treating: Especially since that those swellings do not return (as the Gout doth) by certain intervals; but although they have once or so infested and disquieted any person, yet they may afterwards never again return all the whole life long. And therefore if *Cardanus*, *Mercatus*, or any others, will likewise have these swellings to be called *Arthritis*; let them know that the Ancients were not wont to call all kind of Tumors or Swellings, (were the cause what it would they sprung from) and all kind of pains, I say, they were not wont to call all these by the Name of *Arthritis*. And *Hippocrates* (in the sixth *Epidem. Comment.* 4. Text 13.) calleth those in *Aenos* that by excessive eating of Pulse had gotten a pain in their Knees, not *Arthritick*, but *Gonalgick*, (that is to say, persons Diseased in their Knees) and touching this we shall speak further in the Question next following.

Quest. 2. Whether every pain about the Joynts deserve the name Arthritis.

THere are indeed some of this Opinion, that every pain that happeneth about the Joynts is to be called *Arthritis*; since that if there be any other such like pains, they are no where expressed by any of the Physicians; neither hath any of them written of any pain of the Joynts that is not Arthritick. And although we may meet with some kind of seeming difference, either according to the greatness, or according to the duration of them (a shorter or a longer time) they conceive that this difference doth not at all vary the species or kind thereof.

But I think that *Galen* (in the third Section, Aphorism 15. and 16) writeth most truly; that if the filthiness be so great that it may dry up and consume the moisture of the Joynts, it may then indeed cause a difficulty of the motion, by reason of the driness in the Joynts, and that it may haply cause pain likewise; yet nevertheless it never produceth that affection which is called *Arthritis*; unless any one be minded to call all pains whatsoever of the Joynts by this name. For *Hippocrates* himself, for such as by the over-eating of the bitter Vetch *Orobis* and other Pulse had contracted these kind of pains, he doth not call these Persons Arthritick, but Gonalgick Persons. And therefore although we scarcely find any Author handling all such pains as these in any one place, yet nevertheless we find them treated of and mention made of them here and there, in several places of the same Author. For it very frequently so happeneth that vicious humors heaped up in the Body, may be by a Fever (or else also without a Fever) thrust forth into the Joynts, and more especially the Knees, and may there occasion pains which may oftentimes continue a long while; and such no doubt were those mentioned by *Hippocrates* in the place afore alleadged; which if not alwaies, yet when the sick Person desireth to move his Feet, they then excite Pain: unto which notwithstanding (to speak properly) the name *Arthritis* properly so called, doth not suit nor agree. So in such as have Dropsies and such as are Cachectick, or of an ill constitution, the serous humors falling down into the Feet may indeed excite there a swelling; and those very humors likewise when the Feet are moved may breed and cause much pain, which yet cannot be said to be the Arthritick pain. Neither doth the humor then flow into the part affected by and thorow the Veins, but it by little & little descendeth thereinto by the Pores in the Abdomen. And if we exactly weigh the matter, we shal find that such like humors as these do not seiz upon the very parts themselves that constitute and knit the Joynt together; but that rather a humor from without is poured forth and floweth round about these parts, and sticketh fast between the Skin and the parts constituting the Joynt. And so in the loosening of the Joynts in Wounds, and in Contusions, the humors do oftentimes flow unto the Joynts, and there cause a swelling and pain, which yet is not worthy of the name *Arthritis*. And so those that have their Joynts much dried and hardened (as it is in the Scurvy and other Diseases) these Persons cannot stretch forth, nor move those Joynts without pain, and yet they are not to be accounted Arthritick Persons, neither do we call them so.

And therefore the *Arthritis* properly and in special so called, is only that pain of the Joynts, when the peculiar humor described above, bred in the Bowels of the lower Belly, and heaped up in the Veins and Arteries, by them suddenly floweth into the Joynts, and insinuateth it self more especially into the sensible and tender parts about the Joynts, and there partly by twinging, and partly by distending causeth pain.

Quest. 3. In what place the humor that exciteth Arthritis consisteth.

MAny indeed there are of this Opinion, that the humor the Cause of *Arthritis* doth consist especially in that Cavity or hollow space that is betwixt the extremities or heads of the bones (which by Articulation are joynted together) and that the humors flowing together by the Veins do first of all flow unto those Cavities of the Joynts, and that they then afterwards seiz upon all the parts lying round about, the Bones and the Skin; from whence it happeneth that the Bones sundering themselves, and departing one from the other, the Ligaments, and Nerves, and Tendons, are all of them so extended, that from thence there is excited a most vehement and wracking pain. And for this their Opinion they first of all alleadg that which *Hippocrates* writeth (in Sect. 6. Aphorism 49.) that the *Arthritis* is not ended before the fourtieth day, and that the humors that have flown unto the part affected are not sooner dissolved as being such as stick in a part destitute of heat;

heat; whereas if they consisted in fleshy parts, and such as have many Veins and Arteries, they might easily be resolved. And secondly, they go about to prove it by this, because that from the afflux of the humors into the Cavities of the Joynt the bones are made to divide themselves one from the other, and so by distending the Tendons and Membranes they cause the pain. Thirdly, because that by the motion of the joynt the pain is encreased. Fourthly, because that a pain is first of al perceived in the bottom of the part affected, before ever the external parts begin to swel; but that afterwards when the humors have gotten themselves a way unto the outward parts, the external parts are then lifted up into a swelling.

But the contrary Opinion, which determineth that the fluxion is first of al made into the very parts incumbent upon the joynt (from whence they may haply sometimes, but this is very rare, sweat through into the Cavity or space of the joynt) is altogether more agreeable unto the Truth: and this we are taught first of al by the very breeding it self of the *Arthritis*. For since that the afflux of the humor generating the Arthritis is by those Vessels that carry along the Aliment unto the parts (as we shal afterwards prove) it is necessary that the vicious humor that insinuateth it self into the joynt, should first of al flow into the parts lying upon the joynts, and keeping them close together; and that from hence (if there be any great store thereof) it may insinuate it self into the Cavity of the joynt. Secondly, the bones are so knit together by the strongest Ligaments, that there is hardly any space at all left into which the matter may insinuate it self. Thirdly, The Ligaments are very thick and solid, so that they wil not easily admit of the humors flowing in unto them; and much less wil they permit them first of al to flow into the very Cavity of the joynt. Fourthly, if the matter should flow into the very Cavity, and the bones thereupon divide themselves the one from the other, the Membranes would then be made longer; which yet we see is never done. Fifthly, in the knotty *Arthritis*, those hard knobs that are sometimes taken out of the joynts, are not found in the space between the bones, but about the Ligaments, and the parts encompassing the joynt. Sixtly, if the humor should first of al flow into the very joynt it self, and that it should from hence be communicated unto the external parts, there would then be excited either no pain at al, or such as would scarcely be perceived; in regard that the heads of the bones (in al that space in the which they are knit the one to the other) are not covered with any *Periostium*, but only with a Cartilage; and there is no Membrane or Nerve at al in that place. Seventhly, the tumor or swelling that seizeth upon the external parts, and from the juncture of the joynt is sometimes extended far abroad unto the parts lying neer unto it, it sufficiently teacheth us that the humor, the cause of the *Arthritis*, is not contained in the very joynt it self, but in the parts about the joynt. And lastly, if the humor should be contained in the very Cavity between the bones, it could not be (which yet we see that it often so cometh to pass) that cooling and repelling Medicaments should forthwith drive back the humor from the place affected into the Vessels, and from hence into other places.

And as for whatsoever they alleadg and bring for the contrary Opinion, it may be easily answered. For first of al, That the humors in *Arthritis* are oftentimes long ere they can be discussed, the cause is, not that the humors are contained in the Cavity between the bones; but because they stick in places void of blood, and therefore having but little heat in them; and the humor it self likewise is somewhat unfit to be perfectly discussed. Neither yet nevertheless is this alwaies true; for oftentimes also the matter is dispersed and scattered in a very short space of time, to wit, when there is not much thereof, when it is thin, when the Part is cherished with heat, and the matter not thickned by unfit Topicks.

And moreover, the pain is not therefore excited because the Joynts are stretched forth in length, and made longer, and so are separated one from the other, but because that a sharp humor flowing into the Membranous parts doth distend, and twinge them. And thirdly, although the pain be more excited while the joynt is moved; yet this happeneth not therefore, because that the humor is contained in the very joynt (for as we told you but even now, this is void of sense) but because the Membranous parts about the joynt, being before preternaturally distended by the humor, are now more stretched forth. Neither lastly doth that prove that the humor doth first of al fal forth into the space of the joynt, because that the pain, when the Disease first seizeth the party, is perceived to lie deep, before the external parts swel up, which when it happeneth, the pain is mitigated. It is true indeed that these things do often so come to pass, as that in the beginning there is very little or no swelling appearing, and that yet in the mean time the pain rageth in the top of the part affected, and

there becometh most grievous; which is afterwards asswaged when the external parts swell up. But this doth not therefore happen, because that the humor falleth into the very Cavity of the Joynt, and from hence maketh it self a way unto the external parts, the extreame parts of the Bones being (as we said before) altogether destitute of sense; but it happeneth from hence, that the whole vitious humor doth first of all by the extremities of the Vessels flow unto the Nervous and Membranous parts about the Joynts, and greatly afflict them; but afterwards when part of the humor is likewise distributed into the fleshy parts, the pain becometh more mild and moderate; when the humor is distributed into many places, it doth then act less powerfully; and those parts are made more loose and so are distended with less pain than otherwise: like as we see the very same to be in the pain of the Teeth, which at first is very great and intollerable, when all the humor floweth into the Teeth, and these Nerves inserted into them; but afterwards when part of this humor is distributed into the Jaw lying neer, as likewise the Gums, then the pain is mitigated. But yet in the mean time (as we said before) we deny not this that at length also even some of the matter may possibly sweat through into the very Cavity of the Joynt, if the afflux continue long. Neither do the two last Aphorisms of Hippocrates make at all against our Opinion; where (in the sixth Section) he thus writeth: *Those (saith he) that have been long conflicting with the pain of the Hips, if in these the top of the Thigh fall out of the Hip-Bone, and then return and fall in again, these have in that place a Mucous and snotty flegm collected. And again, they that by being vexed with a long continued Sciatica pain have the top of their Thigh fallen out of the Hip, in these the Thigh wasteth away, and unless they be burnt, they halt and become lame.* For that Joynt doth not therefore fall forth, because that the Bone is thrust out of its place by the humor fallen into the Cavity: but (as Galen in his Comm. upon the Aphorisms teacheth us) because the bonds of the Articulation being soaked and moistened by the flegmatick humor are thereby rendered more loose.

But now what those parts are about the Joynt that receive and entertain the humor that floweth unto them, neither do they all fully agree in their Opinions as touching this. *Capivaccius* and some others with him determine that this afflux is made only unto the Ligaments, and that in the *Arthritis* the Ligaments are filled full, but not so the Nerves and Tendons; since that if these parts were filled there would then be Convulsions: for these parts come to be affected only by the consent of the Ligaments, whiles that they are pressed together by these Ligaments being filled with the humor. But the Ligaments are so hard and solid, that it is not credible that these especially should receive the humor flowing unto them, and be replenished thereby. And the pain is not therefore excited, because that only the Nervous and Membranous parts are pressed together by the Ligaments preternaturally filled with the humor. For if this were the Cause, the pain could not possibly be so fierce and bitter; but because that a sharp and gnawing humor doth prick and twinge the tender and sensible parts. For as in other parts the Membranous *Periostia*, and Nerves, are the subject of the pain: so likewise in the *Arthritis* they contain the highest and most immediate Cause of the said pain. But now that there is no Convulsion excited, we have already shewn you the reason thereof above, to wit, because that the parts that are by Nature assigned for motion are not affected, but such only as are appointed for sense, as the Membranes, or the Nerves likewise themselves (such of them as are not destined unto motion) according to the Membranes.

Quest. 4. *What kind of Feaver that is that accompanieth the Arthritis.*

There are indeed very many that assert this Feaver to be only symptomatical. But since symptomatical Feavers are those properly which follow the Inflammations of other parts (and more especially the Bowels) to wit, when that heat that is in the affected Member, or likewise even the putrid and looty vapors are communicated to the heart, and kindle up the heat in it, and so the fever of the Feaver is in another affected part: it easily from hence appeareth, that the Feaver which is joynted with the *Arthritis* is not Symptomaticall, but primary. For in the Feaver that accompanieth the *Arthritis*, the Fever of the Feaver is not in the part affected (that is to say, the part that laboreth under the *Arthritis*) but it is in the great Vessels. Yea and the Feaver either it precedeth the *Arthritis*, or else it invadeth together with the invasion of the *Arthritis*, and doth not in any wise follow the same. And therefore this Feaver is deservedly referred unto those continued primary Feavers, which nowadaies we call accompanying Feavers; to wit, those that are not solitary, but such as have some other Disease joynted with them, and that depending upon the very same cause with it; to wit, when by the motion of some humor which Nature endeavoreth to thrust forth

forth unto some outward part, or into the habit of the Body, a Feaver is kindled; or at least the matter that is moved unto any part, becometh withall so putrid, that it may cause and kindle a Feaver. And as it is in the *Erysipelas*, *Pleurisie*, *small Pocks* and *Measels*, and the like Diseases; so this cometh likewise to pass in the *Arthritis*; which such a like Feaver is wont oftentimes to precede, and to invade the Party a day before; or at the least, most certainly invadeth together with it; although it be oftentimes very small; and therefore it is not so much as taken notice of by many sick Persons, and especially such as altogether heed and mind nothing but their pain. But now this Feaver is continual; which yet nevertheless remiteth somewhat in the morning, but about the evening returneth again in its full height; and this happeneth from the return of the Blood unto the inward parts; this being either voluntary, or else such as is caused by the coldness of the ambient Air, very familiar unto all continual Feavers.

But the very Feaver it self according to the nature of the humor (which together with the humor that is the highest cause of *Arthritis* is sometimes excited) is wont to be augmented day after day. Now that humor which kindleth the Feaver is not contained in the Veins alone, but sometimes also in the Arteries; and then the signs of putridness are not so evident and apparent in the Urines: yea in the beginning the Urines are oftentimes very thin, and like unto cleer Water, wanting a settling; which kind of Urines are likewise very familiar in other Diseases that proceed from the motion of the serous or wheyish Blood.

Quest. 5. Whether the failing of Mulberries may produce the Gout; or whether the Fruits of the Mulberry Tree may Cure the Gout?

THE Occasion of this Question was at first given by *Athenæus*, who in the second B. of his *Dipnosophist.* thus writeth: *Pithernus* (as saith *Hegefander*) hath left it behind him for our information, that in his Age the Mulberry Trees did not bear any fruit for twenty years together; and that then the Gout as a common and Epidemical Disease raged so fiercely among the People, that it seized upon not only Men, but even Children, Virgins, Eunuchs and Women: and not only so, but this Disease became so vehemently outrageous among the smaller Cattle, that it swept away two parts of all their Sheep. Whereupon some thought that this happened by reason of the defect of the Mulberries for those twenty whole years; and they attributed unto the Mulberry Fruit a Power and virtue of curing and driving away the Gout. And true indeed it is, that Mulberries do loosen the Belly, and that they afford much benefit unto a hot and boyling Stomack: but that they should have in them any power, or peculiar virtue to cure People of their Gout, this neither Reason, nor Experience can perswade us to. Neither can this be proved from hence, that when Mulberries were wanting for twenty years, the Gout greatly raged among the common People. For it is more probable, that by reason of some extraordinary notable faultiness in the Air (which so continued for twenty years together, that it every year hurt the Mulberry Trees) vicious humors fit to generate the Gout were heaped up. Which may appear even from this, that not only Men and Women, but even the Sheep also (which yet never eat of the Mulberry Fruit) were not free from this Disease.

Quest. 6. What the Cause of Arthritis is?

WE have told you indeed that the highest and most immediate Cause of *Arthritis*, is the solution of continuity in those parts that are about the Joynts, proceeding from a humor that hath flown into them, whiles it either distendeth those parts, or else pricketh and launceth them; or else doth both these. And yet notwithstanding as touching this thing, the Physicians do not a little differ among themselves; and as for the highest cause exciting the *Arthritis*, some of them determine one thing, and some another. Which disagreement among Physicians, I conceive hath not been the least Cause why the *Arthritis* hath oftentimes been so unhappily and unsuccessfully cured. For when the Cause of a Disease is not sufficiently agreed upon, it is not possible that the Cure should ever be rightly performed.

And first of all, there are some likewise that do indeed reckon up a naked and bare distemper among the Causes of *Arthritis*, and this is also asserted by *Costæus*. (in his third Book upon *Avicen.* *Fen. 22. tractate 2. Chap. 5.*) for this reason, because that sometimes there is a pain felt, without any swelling at all, which is wont to be joyned unto a distemper with matter. But a bare distemper (let it be even what it wil) is not the highest cause of this Affect, seeing that the distemper that sometimes exciteeth so long a continuing pain, cannot possibly

whether
a bare dis-
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Arthritis?

subsist alone; neither can it likewise be the cause of so great and grievous a pain. And moreover, the very humor it self (oftentimes manifest enough) doth sufficiently shew that besides the distemper there is likewise present an afflux of the humors.

And although in the beginning there is oftentimes no swelling at all that appeareth outwardly, yet neither doth this sufficiently evince that there is therefore no humor within. Like as in the Pleurisie, the Toothach, and the many other pains of other parts, the humor lying hid within discovereth it self by pain alone, but by no swelling at all. Moreover, purging and sweating Medicaments are of singular use in the curing and prevention of this Disease; which yet are no waies necessary in a pure distemper.

And although that *Paræus* relateth a History of his own Disease, by which he would prove that a naked and bare distemper may produce the *Arthritis*; yet this story of his doth not sufficiently prove that there was no afflux at all of the humors present; since that the qualities of the external Air may excite an afflux of the humors. *Petrus Salius Diversus* indeed (in his Tract of the affect. of the parts) maketh mention of an *Ischias* or *Arthritis* from driness; the cause whereof was neither known to *Galen*, nor yet unto any of those that came after him: but *Hippocrates* only knew it, as appeareth in his B. of the internal Affections. But (as he writeth) we are not by driness to understand any dry distemper of the parts constituting the joynt it self (to wit, of the bones, ligaments, and tendons) but a wasting and consumption of its glutinous humidity, by which it is naturally nourished, and whereby the joynt it self is oyled as it were, and made the more fit for motion. For if upon any occasion whatsoever it so happen that this humidity be wholly dried up, there the motion of the joynt is hindered; and a difficulty of the motion, and withal a pain succeedeth. And he tels us, that this Affect, if it be in the joynt of the Hip, it is then by *Hippocrates* called the *Ischiadick* or *Sciatick* pain; but that he himself had likewise taken notice that it might be bred in any other joynt whatsoever.

But *Galen* was not ignorant of this Affect; only he denieth it to be the true *Arthritis*; and he tels us that it was only a certain kind of Impediment in the motion, whilst that in the third Section, and 16. Aphorism, he thus expressly writeth: If immoderate driness consume the humidity of the joynts, it then indeed causeth a certain difficult motion by reason of the driness; and perhaps likewise now and then a pain. But that this passion (which they call *Arthritis*) is in no wise caused, unless any one be disposed to call all the pains whatsoever of the joynts by the name of *Arthritis*. And moreover (I speak it without detracting in the least from the worth of men so eminent) be it so indeed, that such a pain and impediment of the motion may proceed from driness: yet I much doubt of this, Whether or no this pain be caused only by the wasting of that humidity whereby the heads of the bones are as it were anointed and oyled. For in the whol space in the which they are joynd together, the bones are not covered with any *Periostium*, and thereupon they are wholly void of sense; and therefore in this place pain cannot be excited. But it seemeth to be more agreeable to truth (if there be any impediment of the motion, or any pain excited in the joynts by reason of driness) that this happeneth by reason of the over drying of the Tendons, the extremities of the Muscles and Ligaments; by means of which the Members are rendered unfit for motion: and if it be so that they ought to be moved, there is a necessity of their being violently extended; and this violent stretching forth breedeth a pain.

whether
a windi-
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Arthritis?

Seeing therefore that a naked and bare distemper cannot cause the *Arthritis*, it remaineth that we make enquiry from what matter it may be excited. There are some indeed (as *Guainerius*, and *Matthæus*) that make mention of windiness, and of the degrees thereof. But a windiness cannot possibly excite so great a pain, and oftentimes also of long continuance in these parts; unless by windiness any one be minded to understand the spirit; touching which we shall speak more hereafter. And although the pain be oftentimes movable, and flitting from place to place; yet this is not from any windiness, but from the humor, which is also most apt and fit for motion.

Nakir
what kind
of Affect
it is.

There are some likewise that unto *Arthritis* refer that Affect which by the Arabians is called *Nakir*; which *Albucaſis* (in his second B. and 93. Chap.) thus describeth: There is (saith he) in this Country of ours a certain sickness or Disease which they call *Nakir*; and it is a pain that happeneth in some certain Members, and afterwards is changed from one Member to another: and of this disease I once saw such an Example as this that I shall now relate. I was upon a time called unto a certain woman being sick and weak in a Village not far from me. She uncovered her Arm, where I beheld a smal Inflation in the Vein of the Arm; and about an hour after I saw this Inflation to proceed forward with great speed (like as a worm creepeth) and ascending upwards unto the Shoulder much sooner than could

could possibly be imagined: and it was moved upwards like as Quick-silver is moved when it runs from place to place. The pain therefore departed out of the place where it was at first, and fixeth it self in the Shoulder. And afterwards, as she her self told me, it rowled up and down throughout the whole Body; even as I my self might very easily discover it to be so. I therefore greatly admired the swiftness of its motion from Member to Member; for indeed I had never until now seen any such kind of Disease as I saw in this Woman. Indeed I have seen many that have felt the pain changing and going from one member to another, but not after this manner, or with this celerity; neither could I here conjecture any other cause then this, to wit, that the Woman was quite spent, and dispirited by the heat of the Sun, and her hard labor and pains-taking, (such as they are wont to undergo that live in villages) her Body being very dry, and her Veins uncovered. And hereupon therefore that windiness appeareth to be changed even sensibly; and of necessity it is that it cannot appear after this manner in such as live idle and delicated lives, and in moist Bodies, and where the Veins are kept covered. And therefore whensoever thou attemptest the curing hereof, and the Patient Feel that pain, then if it be the same, it appeareth to the Eyes, as we said before. Then hasten and bind both upon it, and under it; and cut upon it, till the Windiness that is pent up and kept in hath a vent and passage made for it to go forth; and Cauterize the place. But if it be so that thou canst not see the place that is affected, and the pain, then Cure it with the excussion of the Body, and some kind of Remedy that expelleth windinesses, and extenuateth them. And for this purpose, very necessary and useful are the Foetid Pills, the Pills de Sagapeno, and the like. Thus far *Albucaſis*.

But this Disease is not *Arthritis*. For neither is it only about the Joynts, but it ariseth from a Windiness, or furious spirit poured forth out of the Vessels, and running to and fro throughout all the external parts of the Body: There are some who think that this motion of windinesses, and spirits, is made in the Veins themselves. And true indeed it is, that oftentimes in the Vessels and Bowels such like windinesses do run up and down with great violence and rushing; like as *Antonius Benivenius* (in his Tract of hidden Diseases, and the Cure of the Causes, Chap. 81.) Relateth that *Ludovicus Nicolinus* was so affected with a winde rushing violently into his Bowels and Stomack, that not only his Bowels and Breast, but his shoulder-blades were likewise extended with an incredible pain; and he was likewise forely troubled with a great and miserable streightness of breathing; whereupon also he died the third day. But in that History of *Albucaſis*, it is probable, that the Flatulent and windy spirit that he speaketh of was poured forth of the Vessels into the very superficies and out side of the Body. For seeing that the motion there spoken of was Joyned with a great pain, that spirit could not be contained only in the Vessels, as being such that are destitute and void of all sense.

And some there are who think (and this rightly enough) that this Affect, (if it be not one and the same, yet that it) is very neer of kin unto that described by *Wierus*, in a peculiar Tract, (in a Book he wrote in the German Tongue, touching unknown Diseases:) of which likewise *Henricus a Brar*, wrote an Epistle to *Petrus Forestus*; which Epistle is annexed unto the observations of *Forestus*, in his twentyeth B. of Observations. Those of our times do for the most part refer them to enchantment; and they tel us I know not what of Elves and Fayries that (as they conceive) breed those pains; when yet notwithstanding these and such like of flitting pains that run up and down in the Body may also have their Natural Causes, and they may have their Original from a certain sharp Flatulency, or a sharp whey bred out of a Humor almost Scorbutick, and roving up and down the Body by the Membranous parts and Muscles. And from hence it is also apparent, that they cannot be fitly referred neither unto the *Dracunculi* of the Ancients; in regard that there is here no worm that lieth underneath. The *Westphalians* for the Cure hereof use (as a peculiar Remedy) Earth-worms; of which see *Wierus*, in the place alleadged.

But we shall add no more touching this affect; in regard that it doth not properly appertain unto *Arthritis*, of which we are now treating. And yet by the way I think it not fit to pass over in silence what I find mentioned in the Histories of those that were troubled with the *Arthritis*, (which *Forestus* bringeth in his 29. B. and so likewise in his 14. Observation) where we find mention made of one *Hugo Cornelius*, twenty eight years of Age, who over wearied and tired out in the employments of his

his Husbandry, and very sleepy as he was, laid himself down upon the Ground, and there he slept for some certain hours; at length awaking, in his left hand, about the wrist, he felt an intollerable pain, which at length seized his whole Arm, inso-much that he was not able to move his Hand, or so much as to stir his fingers, which were now grown stiff as it were: and soon after he was troubled with the same pain about the Foot, unto which was added likewise a very strong and violent Feaver. Of all which notwithstanding by purging and altering Medicaments, and by the administering of Topicks, he was cured in seven daies times, or less. Where he likewise maketh mention of another, who very drunk as he was lying all night in his Garden upon the cold ground, when he awoke was immediatly taken with a violent feaver, and most intollerable pains, of which in a very short time he died. But as it seems to me, those affects were not properly Arthritic, but rather acute feavers contracted from Vapours exhaling out of the Earth, which they both of them received by sleeping thereon; in which feavers Nature thrust forth part of the vicious Humor unto the extream parts of the Body; and so from this Humor there were not only pains excited in the Joynts, but also in the whole Arm, the Mem-branes of the Muscles being there affected: and so great was the pravity of this Humor, that it likewise snatcht away one of these two by a sudden Death.

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Seeing therefore that neither a naked and bare distemper, neither yet a windi-ness alone can be the cause of *Arthritis*, most Physicians indeed therefore agree in this, that it is some Humor that causeth the *Arthritis*: but what kind of Humor this is, herein they greatly differ. Some of them think that all the four Humors (to wit, Blood, Choler, Flegm, and Melancholly) may be the cause of *Arthritis*: and this they endeavour to make good more especially from hence, that in *Arthri-tis* there appear many different colors of the swellings, divers kinds of pains, and various accidents; the term of the declination not one and the same, and a much different way and Method to be observed in the Cure, according to the variety of the Causes. To wit, (that I may use the very words of *Petrus Salius Diversus*, in his Treatise of the *Parts affected*, Chap. 16.) in some the Colour is much inclining to be red, in others yellow, and in a third sort, white. The swelling is now and then of a considerable bigness, and sometimes again it scarcely appeareth. And as for the pain, it is sometimes indeed very troublesom, but yet not so but that it may well be born; but then at other times (according to the Humor, the cause thereof) it is most sharp and intollerable. And then again, this pain is sometimes soon gone and vanished, but that continueth a long while. But oftentimes also divers evil Symptoms do follow, as an extraordinary great heat and burning in the place affected. But sometimes again, either there is present no heat at all, or on the con-trary, there is a coldness that greatly troubleth the party; some of these persons being offended by the Air when it is over hot, and others by an Air too cool. The way and course of Curing is sometimes also very various, because in some of these such Medicaments as heat are found to be most beneficial, and in others those bene-fit most that cool; the pains in those being the more enraged by things that are cold; but in these they are heightened by such things as are hot. And then again, some of these pains are appeased by the Evacuation of the Blood, some by the pur-ging forth of Flegm, a third sort from the emptying forth of the Choler, and the last kind of them by the Evacuation of Melancholly are very much mitigated and al-laid. All which seemeth to denote thus much unto us, that the cause of the *Arthritis* is sometimes hot, and now and then cold and sometimes, the matter thereof very various and different.

But these Reasons do not sufficiently prove that which they ought. For although that (according to the various treasuring up of Humors) divers kinds of Humors may flow unto the part affected; yet these are not the prime and principal cause of the *Arthritis*, but together with the *Serum*, or Whey, they are forcibly carryed unto the part affected; or else they are drawn thither by the pain. And that that Humor which breedeth the swelling is not the principal Cause of *Arthritis*, appea-erh even from hence, that in the beginning before the part swelleth, the pain is most intense, and violent, but as the part by degrees swelleth up, so the pain more and more remitteth. Neither indeed is this opinion agreeable to the truth. For many there are who although they be troubled with a Plethory and Cacochymy, yet not-
with-

withstanding they are not at all taken and seized upon by the *Arthritis*. And in special, (as for what concerneth the Blood) it doth not at any time any manner of way generate the *Arthritis* by its abundance. For the blood is the Treasury of Nature; and therefore although it doth abound, yet nevertheless Nature doth not easily and upon all occasions expel it unto any part whatsoever, but more especially those parts that are void of blood, such as they are that are affected in the *Arthritis*. And then again, if the blood should also happen to be driven forth thither, seeing that it is milde and harmless, it could not possibly stir up so great and vehement pains; which yet are alwaies present even in the beginning of the *Arthritis*, before such time as the part begin to swell, and grow red. And if the *Arthritis* were from the blood, why should not the Tumor then be suppurated; since that there is no Humor so easily brought to a suppuration, and converted into Pus, as is the Blood?

And as for Melancholly, the Case is likewise very plain; and there are but few that will have this Humor to be the cause of *Arthritis*: for it being a very thick and dull Humor, it cannot easily insinuate it self into those most streight and narrow passages.

But as for Choler, there are some who upon very good ground will have the *Arthritis* to proceed from it also, and not only from the flegm; and this they endeavor to prove even by those very signs that appear in the *Arthritis*. For the pain is for the most part extream sharp and violent; and not unlike unto that pain that is pricking and shooting; and the Diet that went before was dry and hot; or at least, very much tending thereunto: the exercises also were over-violent; and the habit of the Body thin and spare. And the very truth is, that this is not indeed to be denied, that those things do sometimes befall the sick persons; and that oftentimes also the pain is so sharp, that it cannot possibly by any meanes be referred unto that Crude Humor Flegm, but argueth rather a hot Humor. But now a Question may be here made, whether or no every preternatural hot Humor may be called Choler; and we think that we may well deny this to be a truth: and we determine with *Carolus Piso*, that there may be a Serous or Wheyish Cacochymy, (although he doth not rightly explain it) and that there may likewise be a Serous Humor that may be most hot; and that under it there may also be comprehended those sharp *Ichores*, (of which we find *Hippocrates* and *Galen* making mention, and of which we shall have occasion to speak more anon) or if you had rather speak as do the Chymists, that Tartarous Salt, or the spirits of Tartarous Salts. Neither are all that are troubled with the *Arthritis* of a thin and lean, or slender constitution of Body, and a Cholerick Constitution and temperament.

Fernelius (in his 6. B. of the Diseases of the parts, and the Symptoms, Chap. 19.) rejecteth all the other Humors; and he there determineth, that not blood, nor Choler, nor Melancholly, but only the cold pituitous or Flegmatick, and Serous Humor, may be the Cause of the *Arthritis*; and that every *Arthritis* is cold, and proceedeth from a cold Humor. And in this indeed his Opinion is right and agreeable to the truth, that of one Disease there is but one only cause; but in this he is very much mistaken, when he tels us that this Humor is cold; since that almost all the Symptoms that befall Arthriticke persons teach us the Contrary; to wit, that most acute and sharp pain, burning heat, sudden motion, and the rest of them. For although when this Humor first beginneth to be moved there may arise some kind of coldness, by which the whole Body may be extreamly Chilled, and made to shake; yet notwithstanding this is no sure and certain sign of a cold matter; since that even the hot Humors also (when they are moved through those parts that have their sense and feeling) may by little and little produce a coldness, or chilness, and horreur; as it is also very manifestly to be seen in Cholerick Feavers. And then Secondly, he erreth likewise in this, that he accounteth flegm and the Serous Humor for all one Humor; as likewise in this, that he will have the Serous Humor to be simply a cold Humor. For albeit that in the Serous Humors there are many parts that are waterish; yet there are also many parts therein that are sharp and Salt, by which it differeth from simple and pure Water.

But *Fernelius* seemeth to have taken this his Opinion from *Galen*, (in his tenth Book of the Composit. of Medicaments according to the place, and 2 Chap.) where he writeth, that the Humor which exciterh the *Arthritis* is sometimes indeed the Blood,

blood, but for the greatest part a Flegmatick Humor, or mixt Humor, partly Flegmatick and partly Cholerick, or likewise of the blood mingled together with those aforesaid. Or if any one would speak more exactly as concerning it, he may say that it is not a flegmatick humor, but that the Humor which most an end is called Crude and indigested, and is for the most part predominant about the Joynts, is now and then very thick, and like unto the thicker sort of Pus: but when it hath for a while continued in the joynts, it is then rendered not only more thick, but also viscid and clammy.

There are very many other Physitians that in this follow the Opinion of Galen and Fernelius; and they account the Flegmatick, Cold, Crude, and Serous Humor, for one and the same; and withal they teach us that it is the cause of Arthritis. But in this they are all of them mistaken; seeing that neither can so sharp a pain proceed from such a cold and crude humor; and because that the Arthritis invadeth the sick person suddenly; and then oftentimes lieth hid again for a while, and is removed into another place; for the doing of which the thick and dul flegmatick humor, and that humor likewise that so nearly resembleth thick Pus, is altogether unfit. And moreover, seeing that even in the very beginning (when there is no swelling as yet appearing) the pain is most vehement and exquisite, this is sufficient to shew that it is caused by a humor both subtil and sharp (and this also penetrating into the most streight and narrow passages, and pricking the Membranes) and that it proceedeth not from any thick and cold humor. Neither do those Tophi that are generated in Arthritic persons sufficiently evince that Flegm is the cause of Arthritis, because that those Tophi or hard knots before spoken of do rather proceed from a humor that is Tartarous and nearly allied unto Earthly Minerals, than from a crude and raw flegm. Thomas Erastus indeed (in his fourth Disputat. against Paracelsus) writeth that he never but once saw the Gout bred from a pure and meer flegm; and this was in a certain noble person of Helmstadt, who was sick without any pain at all, if he kept but his hands and feet quiet: there was no redness to be seen; but a white swelling loose enough; although that his joynts were not without hard knots, but had many of them, and that for many years before he had not been able to stand upon his feet. But that Affect at this time was not indeed the Gout truly and properly so called, but only an Oedematous tumor, with the which the feet (by reason of a long and lasting afflux of the humors) were much troubled. But now that in the very beginning the blood with the flegm (or rather indeed a serous humor) flowed down into the Feet, and corrupted them, this is confessed even by Erastus himself.

whether or no the touching Arthritis) will have the serous and wheyish uncleanness to be the one only cause of Arthritis. Which Opinion (if it be rightly explained) is absolutely true and undeniable. But in this he is deceived, that he thinketh this Serum or Whey to be a pure Water; since that we are taught far otherwise by the symptoms, and those things that befall Arthritic persons.

whether flegm mingled with choler, according to Mercurialis? But others there are (among the rest Mercurialis) who both knowing and acknowledging that such vehement and grievous pains cannot possibly be excited from a flegmatick and crude humor (in regard that it is certain that those most vehement and wracking pains are from a hot cause) and that likewise the flegmatick and crude humor is altogether unfit for so quick and sudden a motion as we see to be in the Arthritis; and that it cannot possibly insinuate it self into those Membranous parts; they therefore take the latter of the two Opinions in the place alledged out of Galen, and determine that the Arthritis hath its original from Flegm mingled with Choler; and that the Choler is mingled together with the thick and tough flegm, being unto it as a Vehicle, or Conduit-pipe, for conveyance. But yet neither doth this Opinion satisfy us, unless that mixture of Flegm and Choler be understood of the serous or wheyish humor. For seeing that they themselves do acknowledge that so fierce and cruel a pain doth require a hot cause, this cannot therefore be from Choler mingled with Flegm, since that flegm doth dull and blunt the acrimony of Choler, rather than increase it.

whether crudity according to Mercatus may be the cause? Ludovicus Mercatus whilest he acknowledgeth, that the vicious humors (although they abound in the Body) do not presently generate Arthritis, but even other Diseases; and therefore he betaketh himself unto a Crudity also; and thereupon determineth that the vicious humors ought to be Crude and undigested, before they can generate the Arthritis. But then when he would again acknowledg, that a Crudity is not simply enough and sufficient for the generating of Arthritis, he feigneth and inventeth divers things as touching Crudity; and determineth that that Crudity alone is fit for the generating of Arthritis; which proceedeth

proceedeth from the rarity and thinness of the heat (now whether or no he here speak properly I leave it unto any mans Judgment) and that it is done three manner of waies. First of all, when the fatter part thereof is separated and drawn out from it. Secondly, by reason of its dissolution from an External heat. Thirdly, because that it hath mingled with it somewhat that is unconcocted, but hot. And yet notwithstanding at the length he concludeth, that this Crudity of the humors is not any ordinary kind of humor, such as the rest are that procreate and beget Feavers, Defluxions, and many other Diseases; but that it is a Crudity which obtaineth something that is peculiar and proper unto it, by reason of which it more inclineth unto, and sooner causeth this Affect than any other: and this (as he tells us) is then done when the humors are made more thin by their being poured all abroad, and likewise by their mordacity and corroding quality; by which they are easily separated from, and rejected by all the other parts, until they come to the Joynts. In this indeed he rightly and most truly asserteth, that that humor hath something in it that is peculiar, by which it generateth the *Arthritis* and no other Diseases. But now, if we well and exactly weigh and consider this Crudity, or rather the Condition of the humor (as he calleth it; but yet every humor that is preternatural may not rightly be called Crude) most certainly agreeth with the serous, salt, and tartarous humor before mentioned and described by us; as such which is thin, biting, poured abroad, or (as the Chymists speak) resolved by the tartarous salt. So that *Mercatus* seemeth to have understood the thing well enough, but yet was not able well to express himself in words, as concerning it.

Ambrose Parry (in his 17. B. and 2. Chapter) whenas he himself likewise took notice that the humor which generateth the *Arthritis* was a nature altogether different from those that are the Authors of the *Pblegmone*, *Oedema*, *Erysipelas*, or *Scirrhus*, he for his part determineth, that the nature of this humor was neither better nor worse, but the very same with that from whence the Plague, French Pox, or the Epilepsie have their Original; and this he endeavoreth to prove: 1. Because this humor never cometh to a suppuration, as do all the rest of the humors. 2. Because that it produceth pains far more sharp and bitter than the other humors; insomuch that the sick Persons often complain that they feel the part affected to burn as they think. 3. Because that it is changed into hard knobs or knots, which doth not happen unto any other of the humors. 4. because that it wil very hardly give place or remove for any Remedies whatsoever; but is rather more stirred up, exasperated, and enraged by them; so that the Patients are ready to tell us, that it is far better with them when they are without any remedies at all than when they have them applied. 5. Because *Galen* himself (in his B. of *Theriaca* to *Piso*, Chap. 15.) saith that Treacle is very useful for all Arthritick Persons whatsoever, as that (in *Paræus* his Opinion) which dulleth and blunteth the malignity of the humor. In this indeed *Paræus* his Opinion is right, that the common ordinary humors (Choler, Flegm, and Melancholly) do not produce the *Arthritis*, but that the humor which is the Cause of the *Arthritis* doth obtain and hath in it somewhat that is proper and peculiar, and this is sufficiently proved by the Reasons above alleadged by him: but indeed there is no need at all that we should here have recourse unto any peculiar Malignity, and occult quality; neither do the Reasons alleadged prove it. For there appeareth here nothing that is Malignant; but the vehemency of the pain proceedeth from the Acrimony of the humor; the which happeneth likewise sometimes in the pain of the Teeth, Ears, and other parts. And although that *Galen* commend Treacle as good against the *Arthritis*; yet this doth not at all argue, nor make that it should subdue the Malignity of the humor, but rather that it should consume the vicious humors; and many other Medicaments of this nature are also before propounded, in the Cure of the *Arthritis*. But yet in the mean time we do not deny this, that the humor (which is the cause of the *Arthritis*) may sometimes likewise obtain a peculiar Malignity; like as we see it to be in the Scurvy, and the *Polonian Plica*. And yet notwithstanding we say, that it doth not produce the *Arthritis*, as it is a Malignant humor, but as it hath that disposition which other humors also (exciting the *Arthritis*) do obtain; that yet are altogether void of any the least Malignity.

And lastly, (that we may likewise a little consult the Chymists) we do indeed very much expect and hope for some light to be given us by them, for the clearing up of the point now in controversie. But we shal hardly get any the least light or satisfaction from *Paracelsus* and his followers, who for the most part even obscure the plainest truth. For *Paracelsus* (as he is wont) speaketh very variously touching the thing in question: For in his Tract touching the *Podagra Gout*, pag. 540.) he there saith that the Gout is a disease, the seat whereof is *Synovia*; which when it is exalted, the Gout is then excited: And that the

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disease *Arthritis*?

disease is a Mineral liquor, or a sour juyce, such as are, Allum, Vitriol, Vinegar, Barberries, Acacia, and the like; for seeing that these Salts are contrary and opposite unto the *Synovia*, if they be generated in any man, and mingled together with the *Synovia*, they then cause the *Synovia* to boyl over: and then he afterwards tels us strange and wonderful things touching the influence of Heaven (which here I scarcely think worth the relating) as likewise those things which he hath in his 2. B. of the Gout. In his *Paramirum* he referreth this Disease to Mercury precipitate: But in his B. of Tartarous Diseases, Chap. 19. he referreth it unto Tartar. *Petrus Severinus* (in his *Idea Medica*, cap. 12.) teacheth us, that the excited Roots of these Podagrick Affects, if they have their seat in the blood, they boyl up with heat, and send spiritual and vaporous Tinctures unto the Domestick places; and that the Matrixes of the Roots having there rotten fruit, do by a dolorous calamity of the Symptoms absolve the revolutions of the Predestinations. But the truth is, the differences of the pain (that I may in plain and easie terms shew you what he by an affected pomp of words obscureth) do all of them proceed from a diversity of the Salts, of which some are more, and some less sharp and biting: but that these spiritual and vaporous Tinctures are received by their Matrixes, (that is, those parts that are obnoxious unto the drawings out of the Podagrick fruits, when they are resolved; and they have in the general an affinity with them, and therefore readily admit of, and give entertainment to the guest coming unto it) to wit, the joynts, or the *Synovia* of the Hands and Feet.

But here they do by their words obscure a thing that is in it self most plain, and they likewise mingle falsities with truths. For as for what they bring touching the Ebullition of the *Synovia*, and the fervent boyling heat thereof, this *Synovia* of *Paracelsus* is a meer fiction and invention of his own; touching which we have already spoken in our *Tract. de Consens. & dis. Chymicor.* cap. 15. But as for what they speak of the salt Spirits, this (if it be rightly explained, and wel understood) is very agreeable unto the truth, as we shal shew you by and by. And so likewise we may wel enough bear with them in this, that they endeavor to explain the differences of the pains in Arthritick persons from the differences of the Salts that appear in Vegetables and Minerals; in regard that our own ablest Physicians (and among the rest, that most experienced *Felix Platerus*) are al of Opinion, that the humor which is the cause of *Arthritis* is not simply a Water, but endued with a quality of a different Nature, and mingled together with the *Ichores* and Excrements of the Humors, by which it is rendered more vehement. And so we likewise judg this more fit to be rejected in them (which yet *Severinus* delivereth unto us in words too obscure) to wit, that the other excrementitious humors are moved unto other parts; and that the humor which is the cause of *Arthritis* hath in it a peculiar tendency unto the joynts; as we also shewed you above. And therefore (that we may at length conclude this controversie) it appeareth from what hath been hitherto said, that neither simply the blood, nor flegm, nor melancholly, nor yet a Water, is the neereft and immediate cause of the *Arthritis*. But when I have wel weighed al those things that befall Arthritick persons, and which cannot possibly be derived from the Humors (as is manifest by what hath been hitherto said) I cannot otherwise determine, than that a salt, sharp, subtile humor (and such as for the most part resembleth the nature of the fallow spirits, is the nighest cause of *Arthritis*. And now, let who wil call it Choler, or Flegm mingled with Choler, or Salt, or Tartar, or what he please, he may do it for me, so that the thing be but rightly explained. I for my part shal make use of the word *Serum* or Whey, Salt, and Tartar, that so I may likewise by a proper and peculiar word explain a thing that differeth from Choler and the ordinary and common Flegm. But now that the *Serum* or Whey is not only a watery humor, even the Ancients have acknowledged; and *Galen* in the sixth of his *Epidem. Comment* 3. text. 33. writeth that the serous or wheyish blood is by *Hippocrates* and *Plato* called not only a Water, and waterish humidity void of biting, but biting likewise and corroding; to wit, which resembleth the nature of the Sallow or Willow spirits; and therefore it is that it pricketh and biteth those parts that are so sensible and quick of feeling, and in these it excitech most acute and intolerable pains. There is, to wit, in the Earth (out of which Plants grow, by which both Man and bruit Creatures are nourished) something that is salt, which answereth unto Minerals; and it may not unfitly be called the salt of the Earth; which yet notwithstanding is scarcely to be found pure and alone, but it is mingled together with other bodies; from whence divers kinds of Earths have their Original; and thereupon (according to the great variety of Soyls) it is very various and different; as Muddy, Clayie, &c. and then at the length in Plants and Animals it is called Tartar; and so is cometh to be transfused into men. But this, albeit that in Plants and Men it become in the many various Concoctions very subtile

The Authors Opinion touching the cause of Arthritis.

tile and volatile (if it be not such before) as very manifestly also it appeareth from the Salt of Urine, and that at length it is mingled even with the blood it self: yet nevertheless in regard that from the very first original of it it is altogether unfit for the nourishing of the body, and is (as *Hippocrates* speaketh) wholly unserviceable thereunto, at the length (unless it be forthwith, even in the first Concoction, expelled forth by the belly or afterwards evacuated forth by sweats and Urines) it is treasured up; and being burdensome to Nature it is thrust forth unto the Joynts (as having a certain kind of neer allyance with such like matter) where by its acrimony it exciteth most vehement and grievous pains. Neither let any be hereat moved, and wonder that we say that this matter is one while spiritual, and sometimes also Tarrarous, and so very fit likewise for the generating those hard knots, which they call *Tophi*. For (that I may speak with the Chymists) spirits may proceed from bodies, and again bodies may be from spirits. This matter in its original, and while it was in the Earth, was a body, and somewhat as it were Earthy, and Mineral like: but it cometh afterwards to be attenuated in the various Concoctions both in Plants and Men, and so it is made as it were spiritual: which hath been acknowledged by many of *Galens* followers; and among the rest, by *Cardanus*, who upon the 47. and 49. Aphorisms of the sixth Section, writeth that the Matter, to wit, the cause of *Arthritis*, is as it were a spirit. And *Lucian* in his *Tragopodagra* calleth it a violent and injurious spirit. And yet afterwards this thin humor or spirit, when it hath once gotten a fit place (to wit, the bones, and the places about the joynts) it again betaketh it self into the body, and is there coagulated; like as it is a thing generally wel known unto the Chymists, and other salt spirits may again be coagulated, and return into bodies. And yet nevertheless if any one shal assert that there is likewise a volatile Salt in the very Earth it self (which yet the Plants draw unto themselves) this doth no way thwart or oppose this Opinion of ours; but the whol result of the business and Controversie in hand cometh al unto one and the same conclusion.

Quest. 7. *Where the Humor the cause of Arthritis, is generated, and by what waies it floweth into the Joynts.*

IN what place the Humor that is the cause of the *Arthritis* is bred, and by what waies and passages it floweth into the joynts, in this Physicians do greatly differ among themselves: which disagreement of theirs hath much hindered the Cure, and made it far more difficult than otherwise it would have been; and therefore not without cause is it that *Fernelius* (in his sixth B. of the Diseases of the parts, and the Symptoms, Chap. 18.) writeth that from the very ignorance of this thing the pain of the joynts hath hitherto been held and left for incurable, and called the shame and disgrace of the Physicians.

We have briefly above given you our Opinion as touching this thing in Controversie. But because there are many (and those some of them of the more able and learned Physicians) that are of another Judgment, and differ from me in their Opinion (as in this darkness of Mans mind it is generally wont to be even in the greatest and most serious Controversies) I shal not think it time mis-spent, nor my pains ill bestowed, in laying before you (with what brevity I can) their severall Opinions; and in the recital of them I shal weigh them accordingly.

And first I shal indeed begin with *Fernelius*; who asserteth that they are much mistaken, who think that the Humor the cause of *Arthritis* doth break forth of the more secret and inmost parts of the body into the Joynts. For how (saith he) is it possible that any pure and sincere humor can from the bowels, and the most inward seats be carried through the Veins; or that that humor which was so lately mingled with the blood should now (without any mixture thereof) by the Orifices of the veins fall pure into the blood; or if there should also together with the humor flow forth any of the blood, why being collected and gotten together in the Joynts doth it not excite a *Phlegmone*? And why likewise doth not the crude humor which is carried into the Joynts by any other passages than by the Veins cause the *Arthritis*? For in the *Cachexie*, the crude humors that from the bowels fall down into the feet, and cause them to swell, do not yet excite the *Gout* in them. But even *Fernelius* himself taketh it for granted, and plainly asserteth that the Head is the Fountain and Original of this Malady, from whence (saith he) a flegmatick humor (and this very thin) floweth forth into the Joynts. And this humor (as he tels us) is not indeed gathered together in the Brain (as whose excrements are either purged forth by the Nostrils, or else by the Palate falling down upon the great rough Artery, and the Lungs, or else into the Stomack, and the more inward seats) but it is (saith he) collected in the external parts of

the Head, and such as are placed without the Skul, and by the top and superficies of the body run along downward under the Skin. For seeing that there are many Veins running forth thither that are derived from the external Jugular Veins, he conceiveth that they may there lay up their thin and serous excrements; and that in regard the Skin of the Head is thick and impenetrable (so that the humors cannot easily expire and breath through the same) that therefore in progress of time they are there stored up, and from thence by the superficies and outside of the body fall down into the joynts.

There are very many other Physitians that follow this Opinion of *Fernelius*; of the which some of them wil have the humor (the Cause of *Arthritis*) to be collected in the Head alone, betwixt the Skul and the Skin of the Head; and they tel us that is the one only place from whence the matter floweth down unto the Joynts: but there are others of them, who although they likewise add other waies, yet notwithstanding they do withall joyn this way of *Fernelius*; and there are very few or none of them, who do not believe but that this matter doth withall flow down likewise from this place of the Head.

But in very truth, what *Fernelius* complaineth of touching the other Opinion (that by reason of it it so came to pass that the *Arthritis* was almost left as a desperate and incurable Disease, and was termed the *Opprobium* or disgrace of Physitians) I conceive (without disparagement unto any mans Judgment) that it may more truly be affirmed of this his own Opinion; and I am of Opinion that that Physitian who seeketh for the Spring and Fountain of this Malady in the Head only (neglecting in the mean time the true Fountain and source thereof) is scarcely ever likely to cure the *Arthritis*. For albeit it be indeed true, that certain various sitting and wandring pains may be here and there excited by the serous humor falling down from the extenal part of the Head under the Skin, by the outside and superficies of the Body; yet notwithstanding the *Arthritis* is never from hence generated; neither is that matter wont to subsist about the Joynts, but for the most part about the membranes of the Joynts. But now the generating of the humor that is the Cause of the *Arthritis* is very different, and of a far other nature. For this is generated in the sanguification, by reason of the Errors in Diet, and the weakness of the Bowels: and sometimes likewise it is supplied from the suppression of the Courses in Women, and the sudden stoppage of the Hemorrhoids in both Sexes; and then it is heaped up in the Veins and Arteries: whereupon also so soon as ever it beginneth to be moved, and to become as it were boyling hot, there is almost alwaies a Feaver joyned with the *Arthritis*: yea and sometimes the Feavers are terminated in the said *Arthritis*; and hence it likewise cometh to pass, that in the *Arthritis* the Urine giveth forth most sure and manifest signs and Tokens of the humor that is peccant in the Veins. And hence it is that *Galen* himself teacheth us (in the third Section, Aphorism 20.) that in little swellings and pains of the Joynts, the deeper parts of the Body are thoroughly purged, the vitious humors being thrust from the more principal parts unto the outside and superficies of the Body: Neither can there any thing else be proved by firm and sonud Reasons. Al which being true as is alleadged, and the case standing thus; and it being most undeniable, that the Humor the cause of the *Arthritis* is contained in the Veins and Arteries, there can no reason be rendered of any necessity (either in Nature, or else in the Disease) why these Humors ought necessarily first of al to ascend up into the Head before they be carried into the Feet; in regard more especially that there is an open and strait way by which they may be moved through the Veins and Arteries, and so carried into the Joynts. And that the matter, the cause of *Arthritis*, is carryed unto the Joynts through the Vessels and not without them, appeareth also even from hence, that the Veins in those joynts that are like to be invaded by the *Arthritis*, swell up and grow big when it first beginneth; and in that the Humor exciting the *Arthritis* (if Repelling Medicaments be unseasonably applied) runneth back again into the Veins and Arteries; and is either transmitted unto the Noble parts, and there exciteth Acute Feavers, anxieties of heart, and other dangerous and deadly Symptoms; or else it is suddenly conveyed into another joynt; whereupon the pain which but ere while infested the Foot, instantly, (if Repellers be unadvisedly administred) thrusteth it self forth and appeareth in the hand; which could not be done, were it not that the Humor were moved through the Vessels. For it is not at all possible that the Humor which but just now was in one of the Toes, should under the Skin be so suddenly carried up into the hand. And if the Humor should in some space of time mount up thither under the Skin, yet it must of necessity cause pain in all those parts through which it passeth, as we may often take notice in those pains that arise from the Serous Wheyish Humor descending without the Skul, that the pain is first of all in the Head, and then afterward it is excited in the Neck, and then in the shoulder blades,

blades, and the back; and that at the length both the Humor and the pain descend even unto the Thighs; which doth not at all happen in the *Arthritis*. And moreover it oftentimes cometh to pass, that a man by wrath, or fear, is suddenly cast into the *Arthritis*; which happeneth most certainly from the Humors being suddenly moved in the Veins and Arteries: but if the head should have these Humors sensibly and by degrees heaped up in its own Skin, this could no waies happen. And again, if the fountain and original of this Malady were under the skin of the Head, why is not then the Cure chiefly directed to that seat, and why are not vesicatories, Cauteries, and issues applied unto the Neck; seeing that there is scarcely a fitter place then this to be found, whereby the matter gathered together betwixt the Skul and the Skin of the Head may be evacuated. And furthermore, if the Original of the Humor were alwaies in the external part of the Head; then of necessity there would be present likewise some signs thereof heaped up there, and descending; which yet in the most are not at all taken notice of, their Heads being altogether safe and sound when yet their Joynts are invaded by the *Arthritis*. *Fernelius* indeed among other the signs of the Humor heaped up, reckoneth the heaviness of the Head for one, as also overmuch desire of sleep, an external pain of the Head, and which is stirred up only by the touching thereof, (especially if the hairs be kembed back but never so little) an Oedematous waterish swelling, like unto soft wax, lying under the Skin, more especially in the hinder part of the Head: but he reckoneth up for signs of the Humor flowing downward, a pain running up and down from the Neck, or by the shoulders, into the Arm and Hands; or else turned down by little and little along the back into the Hips, Knees, and feet, there arising sometimes some kind of sense and feeling of Cold. But indeed it cannot at all be denied, that these signs are present, when there is a Serous and Wheyish Humor heaped up together in the Head, and falling down by the external parts of the Body: but they very seldom appear in the *Arthritis*; it being most manifest by experience, that such as are troubled with the *Arthritis* are yet for the most part very well in their Heads. Neither do such as are taken with the *Arthritis* alwaies perceive that deflux of Humors from the Head, and the pain proceeding therefrom, as but even now we told you. And grant indeed that it be so, that in the beginning of the *Arthritis* the head may likewise in some (where it is but weak) be offended, and that there may be a kind of heaviness and pain perceived therein, Yet nevertheless neither doth this sufficiently prove that the Humor (the cause of the *Arthritis*) is generated in the head, (in regard that the very same often happeneth in Feavers, although the cause of the Fever be not generated in the Head) but the head is then offended by its consent with other parts. For when the Humors boyl with heat in the Arteries and Veins, and that they begin to be moved, they partly rove and run up and down by their own impetuous motion (this being proper unto them, when they abound and swell up) and partly they are by Nature thrust forth hither and thither; and then they more especially sieze upon the weak parts, until at the length they seat and fix themselves in one certain place. And therefore it is not at all to be wondered at, that in such persons as have weak Heads, and heads that are otherwise very subject to excite defluxions, in the first invasion of the *Arthritis* some of the Humors (now about to rush forth unto the Joynts,) should be poured out by the Capillary Veins under the Skin in the head, and there excite pain, and other Symptoms. Which yet notwithstanding doth nothing at all patronize this Opinion of *Fernelius*, since that even those very Humors are not bred and collected under the Skin of the Head, (as he would have it) but they are suddenly poured forth thither by the Veins and Arteries that are sent unto the head from the external Jugular Veins and Arteries. And grant it indeed to be true, that the Arthritic pains properly so called were excited in the Neck, as he saith: yet nevertheless this is not done by the matter that by degrees is collected under the skin, and by little and little floweth thither, but because the humors are poured out thither through the Capillary Veins by which those Joynts are nourished. For like as those humors are carried down to the Feet by the descending trunk of the great hollow Vein and Artery; so the same may be sent upwards unto the head and the parts lying neer about it by the same trunk ascending. And that there appeareth some kind of difference of the Symptoms in the sick persons, it happeneth from hence, that the humor floweth and is moved, sometimes by the trunk of the hollow Vein and

and Artery ascending, and sometimes by the same trunk descending (this being more usual than the other) and now and then by both. For when it is moved upwards by the ascending, before ever it cometh to the hands by the Axillar branches, something may easily be thrust forth by the Jugulars (as well the external as the internal) ascending up into the head, as also into the Brain, and under the Skin; where some of these sick persons may be infested with restlessness and want of sleep, and others of them with a drowsiness, and excessive propension to sleeping and slumbring, and others of them by other Symptoms. But that that Humor which infesteth the Toes should be collected under the Skin of the Head, or poured forth thither out of the Veins and Arteries, and from thence flow down unto the Foot, this cannot be proved by any firm Reason. For what is that right and straight way by the which it may suddenly flow straight down from the head, under the Skin, unto the Feet and Toes? For when the matter destilleth from the head under the Skin, it is dispersed hither and thither; and here and there it exciteh pains; but it doth not tend directly and straight downward unto the extreame parts of the Feet: neither likewise if it should flow down by this way, could it possibly (as oftentimes it happeneth) so suddenly ascend up into the Hand, by changing its way.

And in special, as for what concerneth the excessive sleepiness and drowsiness we oftentimes find in the sick person, (and if there be any other Symptoms of this kind, that arise even in the very brain it self) these do neither appear in every *Arthritis*; neither if they should appear, would they at all confirm the Opinion of *Fernelius*, but rather confute it, as teaching us, that the matter is not generated and moved without the Skull, but that it is poured forth of the very Veins themselves. For this sleepiness and drowsiness is caused from the matter that is heaped up within the brain, and not collected without the Skull; which if it be present in the *Arthritis*, it teacheth us thus much; to wit, that there is likewise some matter by the Veins and Arteries poured forth into the brain it self.

And Lastly, it is manifest also by experience, that even other Diseases (and especially such as are acute, whose matter sticketh in the Veins, and about the Bowels) are changed and turned into the *Arthritis*; and then the thick Urins are a sign and argument of the *Arthritis* nigh at hand. And *Averroes* (7. Collig. Chap. 3.) testifieth that he himself became *Arthritick* from an acute Disease, when Nature by the Crisis had driven forth the Humors unto the Joynts, and especially unto the Feet; which had not been, if the *Arthritis* were generated from a matter flowing down from the Head: touching which we shall likewise speak more hereafter, when we come to examine the Opinion of *Platerus*.

Neither are those things of any great moment that *Fernelius* bringeth against the other Opinion, which we mentioned above, and conceive to be very agreeable to the truth. For when he demandeth, how a sincere humor can flow unto the Joynts by the orifices of the Veins, he calleth that in question which we may every day see done in persons that are sick. For Nature reteinerh the blood as the treasury of life; and lest that it should be defiled and corrupted by the vicious humors, it expelleth them divers waies out of the Veins and Arteries. And certain it is that in the fluxes and Purgations of the belly it thrusteth forth the vicious humors alone out of the *Vena Cava* (or great hollow Vein) unto the Mesaraicks, and from thence unto the Intestines: and by Critical sweats it expelleth the vicious Humors (and these indeed sometimes sincere, but most commonly stinking and of a very ill color) by the orifices of the Veins ending and terminated in the Skin. And the same it doth in the Erysipelas, Scabbiness, smal Pocks and Measles, and many other Diseases; in which Nature (that so it may preserve the Body safe and sound) separateth the vicious humors from the good blood, and expelleth them by the Orifices of the Veins. And yet notwithstanding neither doth that Serous humor alwaies flow sincere unto the Joynts, but oftentimes it likewise carrieth forcibly along with it the blood, and many times also other humors. But as for what *Fernelius* addeth, that if the blood should flow forth together with the said humor, it must necessarily excite a *Pblegmone*, this indeed often happeneth as he himself confesseth, whilst as touching the *Ghiragra*, or Gout in the hand, he thus writeth: *There is* (saith he) *in this affect a beating pain, with a Swelling, Redness, Heat, and for the most part, with swollen and strutting Veins.* And touching the *Podagra*, or Gout in the Feet; there

there is (saith he) a swelling present here like as in the Chiragra; as also a Redness, Heat, and beating pain both in the part, as also in the Veins lying round about it: all which are signs of an Inflammation. Whereupon likewise it is that Hippocrates (in the sixth Section of his Aphorisms, Aphor. 49.) attributeth this name unto the Arthritis, when he saith that such as have the Gout are troubled likewise with a Pblegmone. And yet nevertheless every Inflammation is not necessarily suppurated; and that in the Arthritis the humors are not suppurated, this sheweth not unto us the place from whence they flow forth, but rather argueth the Nature of the humor it self, as being altogether unfit for suppuration; to wit, such as is serous, salt, and tartarous; the thinner part whereof is dissolved, but the thicker part thereof that is left behind is converted into hard knobs or knots. For there is nothing suppurated but the blood, or that which partaketh of the nature of blood, and hath something thereof mingled together with it.

Neither yet doth this likewise prove that the humor descendeth from the head, to wit, that this Disease doth sometimes invade the party with a shaking and trembling, or at least with an ordinary and slight kind of Chills and Cold. For this quaking and cold is no sign at all of the humor descending from the head under the skin, but rather of the humors being poured forth out of the Veins, like as we see the very same to happen in fevers, and the Erysipelas.

Others also there are (as Eustachius Rudius) who think indeed that this matter floweth down from the head; but then that it doth flow unto the Joynts, not only without the Skul, (between the Skin and the pericranium, by the spaces that are under the Skin) but that it descendeth within the Skul also, by the extream superficies of the spinal Marrow: others there are also that tell us, how that it floweth down through the very middle of the substance of the spinal Marrow. But if it were thus, as they say, there should rather a Palsy or Convulsion be from thence excited; and in the middle space (by the which the humors should flow) the Nerves should likewise be affected.

Others there are who Joyn both these Opinions together; and these tell us that the Humor doth partly flow from the head, and partly are conveyed through the Veins; and this is indeed the most common Opinion; which therefore Platerus is very large in the explaining thereof; who teacheth us that the Humors exciting the Arthritick pains may fall down either within or without the Veins. Within the Veins indeed, when the bloody humor causeth the hot Arthritis, (as some call it) having the Feaver Synochus joyned with it. For as by a subtil and thin blood poured forth into the superficies of the Skin Erysipelas's (that are accompanied with the Feaver Synochus, or a continual Feaver) are excited; so likewise while it is poured forth into the seats of the Joynts, the pain of the Joynts (which the same feaver likewise doth accompany) is bred; so that indeed who soever they be that are Obnoxious unto both these Diseases, when they are siezed upon by the Gout, they may then comfort themselves with an Opinion and conceit that it is no more then an Erysipelas: All which things are indeed most true and certain.

And yet notwithstanding he determineth likewise that the Serous or wheyish Excrementitious humors being heaped up together may excite the Arthritis; and that their Original is from the head, and that the Source and Spring of defluxions hath there its existence, and that from it they flow down into the parts lying beneath: but that they are there sometimes heaped up together in its interior seat, betwixt the Skul, and the crude and impure Blood affording matter unto it. For then that part of it that is altogether unuseful for Nutrition, and Excrementitious, is by some and some heaped up in the brain, which when afterwards it falleth down it then breedeth the pains aforesaid; which are accompanied with a heaviness of the head, and sometimes with a great pain therein, and other accidents, the sure signs and tokens of the matter heaped up together. And he tells us that the Excrementitious blood is caused by the vice and error either of the first, or the second, or even of the third Concoction that is made in the brain; by reason, to wit, of some distemper or weakness therein. And withal he telleth us, that all this filth and excrementitious Humors that are heaped up in the head, do either by Reason of their too great abundance, when they are stirred to and fro, flow downwards, or else they are pressed forth, and poured all abroad by the external cold and the moistness of

of the Air; or else that they are stirred up by the heat of the Sun, or some Bath, the Pores and passages being opened, and the expulsive faculty provoked.

And yet he determineth likewise, that the very same serous and excrementitious humor may likewise be stored up without the Skul, betwixt it and the Skin, and that it may from thence flow down into the inferior parts.

But he teacheth us that the waies and passages (by which this defluxion is from the Head) are very various. As for the humor collected within the Skul in the Basis of the Brain (consisting of three Cavities ending in the very bottom of the Skul) he tels us that it is sometimes strained through by the hole of the Bone they call *Cribrosum* (bearing some kind of resemblance with a Sieve) and distilleth out of the Nostrils, and that it then exciteth that distillation we call *Coryza*, or the Pose: and that sometimes likewise it is carried into the middle Cavity, which is full of holes, and looketh toward the Palate; and that then it is either blown forth by the Nostrils, or brought forth of the Jaws, and spit out by screaming and retching; or that descending into the seat of the Eyes, it exstilleth forth by tears: and that sometimes it followeth the conveyance of the Nerves in the midst of this seat (of which some of them pass through by these holes:) and that sometimes it being carried into the hinder Cavity of the Skul (which is lower and wider) it descendeth through the great hole (in the hinder part of the Head) of the Spinal Marrow, into some place of the habit of the Body; and that it stoppeth either in the fleshy parts any where, or about the Region of the Joynts, and there causeth the aforesaid pains of defluxions, or of the Joynts.

But as for the humor collected without the Skull, and flowing downward under the Skin (as it insinuateth it self either into the Joynts or the fleshy seats) he endeavoreth to produce divers kinds thereof: all which he explaineth at large.

But in very truth, as we willingly admit of those things that he produceth touching the motion of the humors without the Veins (in which he agreeth with *Eustachius Rudius*) so we cannot be induced to believe that the *Arthritis* is generated from thence. For first of all, the matter that is generated in the Brain, and exciteth the *Coryza*, or abundance of spittle, and is cast forth by the Nostrils and the Jaws, it is of a far different nature from that which breedeth the *Arthritis*; and it could not possibly otherwise be, but that if a matter so sharp and fiery, as it were, should be generated in the Brain, it must needs produce most grievous symptoms. And moreover whether this humor descend according to the passage of the Nerves, or according to the conveyance of the Spinal Marrow, it could not be, but that it should first of all in its passage cause either a Convulsion or a Palsey, or some kind of pain, before ever it could come up to the extrem part of the Feet and Toes, and should there excite pain; whereas notwithstanding on the contrary we oftentimes see (and especially in the beginning of this Disease) that there is suddenly a pain excited in the Feet, no pain at all, or symptoms elsewhere appearing. And furthermore I likewise willingly indeed grant that from the matter heaped up under the Skin of the Head the pains of Defluxions (as *Platerus* rightly calleth them, and distinguisheth them from the Arthritick pains; although he be mistaken in this that he determineth that these pains and Defluxions are only in the fleshy parts of the Muscles, whereas indeed they are equally about the Joynts) may be excited in the fleshy places and Membranes of the Muscles: but yet I cannot perswade my self that the *Arthritis* properly so called, returning by certain intervals, and having alwaies one time of duration, should thence be generated. For if the humor should fall down betwixt the Flesh and the Skin, it must first of all seiz upon the parts nigh unto the Head, and upon the Joynts; seeing that (as *Galen* expressly teacheth, in his 2. B. of the *Difference of Feavers*, Chap. 11.) those fluxions that are from the Head are wont in the first place to infest the parts neer unto the Head, as the Ears, Eyes, Teeth, Gums, and the Glandules that lie next, or the Breast and Lungs, and the Muscles of the Back; whereupon such like pains from a Defluxion presently in the very first beginning of the descent of the humor from the Head are perceived in the neck (before and behind) and in the Shoulder blades; but they scarcely ever descend into the Toes (which indeed are most of all infested by the *Arthritis*) that same thin serous humor vanishing by the way; which happeneth not in the *Arthritis*, in which the pains are wont first of all (and that very suddenly) to be excited for the most part in the very ends of the Toes. For what *Solenander* writeth concerning a certain noble person (as we may find it in the 24. *Consil.* of his fourth Section) who being troubled with the *Arthritis* about the latter end of the Winter, had (as he saith) the humors therefore moved from the Head, because they were not suddenly augmented, but increased by little and little, and running from Joynt to Joynt, from Foot to Foot, and from thence into the Knee; and that from hence they ascended and seized upon the Hands, and after this

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insinuated themselves into the Joynts of the Elbow; this I say seemeth unto me a thing very improbable. For if the Humor had flown from the Head, it ought first of all to have infected the Elbows, and then the Hands; first the Knees, and then the Feet; whereas here the quite contrary was done. It seemeth more agreeable to truth, that this was done from the nature of the humor, and the great abundance thereof. For when it was more thick in the Winter time it is was moved the more slowly: but when once there was great store thereof heaped up, Nature first of all drives it forth unto the extream parts, which when they could not possibly receive all of it, she then afterwards thrust it forth likewise unto the more neer neighboring parts. Neither indeed can I see any way, by which this humor heaped up without the Skul, should be carried down straight and directly unto the Feet, and not ranble and rove up and down, hither and thither, like as do those pains from Defluxions. And be it so indeed that the Brain doth likewise sometimes suffer certain symptoms; and that the pain may first of all begin in the nook of the Neck, and may after this seiz upon the Shoulder, afterwards upon the Elbow, and lastly, upon the Hand; yet notwithstanding that is not at all yet proved which ought to be, to wit, that this humor descendeth without the Skul, betwixt the Skin and the Flesh. For first of all how the Gout *Podagra* comes to be bred in the Feet, is not shewn in this manner. And moreover, albeit the humor flow within the Veins and Arteries, there may the very same symptoms be produced in the Brain (which could not at all be if the humor were moved without the Skul, under the Skin) and also the same pain in the Nook, Shoulder, and Elbow. For while nature is endeavoring to expel that vicious humor by the ascending Trunk of the great hollow Vein, and Artery, there may very easily by the Jugular Veins and Arteries something flow into the Brain, which may there excite some kind of symptoms; and before ever it come so far as the Hands, it may easily happen, that Nature may by those Branches that are dispersed throughout the Nook and the Shoulders thrust forth something into those parts. And whereas all the Joynts in the whol Body, as also the parts that lie about them receive their nourishment from the Veins and Arteries, there is no Joynt in the whole Body into which likewise the humor (the Cause of Arthritis) may not flow in by the very same Vessels, so that there wil be no need at all of seeking for blind and hidden waies and passages even from the most remote parts. And that I may in the last place likewise grant this, that it may possible be, that such like serous humors abouading in the Veins may also be thrust forth into the Head, and poured out under the Skin, and upon the approach of the Arthritick Paroxysm, and Nature setting her self upon the work of expulsion, they may likewise be moved, and by the Neck may descend into the Back: yet notwithstanding these are not those humors that breed Arthritis; but descending under the Skin, and pulling the Membranes in the outside of the Body, they excite those roving and flitting pains, yea and sometimes also they breed a spurious and bastard Pleurisie; but they are very easily taken away by frictions, discussing Medicaments, and Sweats, the Arthritis yet still remaining.

Franciscus India (a Philitian of Verona) in his first *B. of the Gout, Chap. 4.* rendreth this thing very intricate, whiles he writeth that the members that send forth these superfluities are various and very many; and especially the Head, the Stomack, the Intestines, the Liv, and the Kidneys; and that those Fluxions are indeed more especially from the Head, and from the Brain; because that although those humors draw their Original from the Intestines, and from the Stomack and other Members, before they flow unto the parts of the Joynts, they first of all ascend into the Head, and from it are afterwards transmitted unto the parts lying underneath it. But yet he doth not indeed deny that those humors proceed from the whole Body. For if (saith he) the Body were altogether free from superfluities, no humor would at all flow in. And yet nevertheless he denieth that the matter doth immediately flow from the whol Body unto the Joynts, seeing it cannot possibly be, that the humor which is found in the Stomack, or the Intestines, or in the Liver, or Spleen, should so suddenly from these parts flow unto the Joynts, unless by the incitation of Nature it were driven forth by those waies that lead unto the Joynts. Now he determineth that those waies are the Veins, Muscles, and Nerves. The Veins, to wit, that are destined for the nourishing of the Hands and Arms, do carry the excrementitious humors that have their existence throughout the whole Body unto the Ligaments of the Fingers; the Tendons, and the Joynts. But the Muscles that arise from the Shoulder-blades, and the very top of the *Spina* and that are implanted into the Shoulders do receive the same excrements from the inferior parts of the Body, and derive them unto the Ligaments of the Fingers. But as for that matter which floweth from the Head, Nature thrusteth it forth unto the Joynts of the Fingers by those Nerves that descend from the Head. And yet notwithstanding afterward he denieth that the humor is carried from

the Head alone unto the inferior parts of the Body; as for Instance, unto the Knees, the Thighs, and the Ligaments and Joynts of the Toes; but that by the consent of the Veins and Nerves of the *Spina* or Back-bone, and by reason likewise of the consent betwixt the Kidneys and the Knees, Thighs and Feet, it is sometimes also carried from the said *Spina* of the Back and from the Kidneys unto the Ligaments of the Knees and unto the Joynts of the Toes.

But in this Opinion there are contained many things that are false. For first of all, whereas it is said that the matter floweth from the whol body unto some one place, we are not hereby to understand al and every part of the body, the stomach, the Intestines, the Liver, the Kidneys, and other parts, but only those kind of parts in the whol body that are filled with Veins. For although that the excrementitious humors may be generated in the stomach, Intestines, Liver, and Spleen: yet when they are heaped up, they are then distributed into the great hollow Vein, as also into the Arteries, with that perpetual flux and passage to and again of the blood; and from hence they are thrust forth unto the external parts of the body, as in the *Scabies* we may see, and so likewise in very many other Affects. And therefore if vitious humors be heaped up in Arthritick persons, there is no need at all that they should be derived unto the Joynts by so many turnings and windings, by the Muscles, and by the Nerves; seeing that there is a neer and direct way through the Veins and Arteries, from which as al other parts of the body, so likewise the Joynts receive their nourishment. And furthermore it is no way agreeable to truth that the humors should flow unto the Joynts by the Nerves: for neither do the Nerves easily admit of, and receive so great an abundance of humors; neither were it possible, if that matter were received by the Brain, and should flow unto it through the Nerves, but that it should first of al excite most grievous Maladies, before ever the *Arthritis* could arise and appear. *India* indeed seeks by al means to avoid al these inconveniences, whiles in his sixt Chapt. he writeth, that the matter which floweth doth not fill the Nerves within; but only distend the same outwardly. But this is not to flow through the Nerves: neither doth he in this manner shun those inconveniences, whiles he doth not shew us how by a continual passage from the Head (according to the progress of the Nerves) this matter may flow, so that yet notwithstanding it may in its way and passage excite neither Convulsion nor Palsey, nor any other pain. And indeed to what end is there any need of those ambages, and turnings and windings about (this way and that way) by the Muscles; when (as we have already often said) there lieth a direct and straight way out of the Veins and Arteries into the Joynts?

Adrian Spigelius (in his B. of the *Arthritis*) hath a peculiar Opinion as being held by him alone: who when he would acknowledge that this afflux is altogether made by the Veins and Arteries, and yet nevertheless would not altogether desert that Opinion which determineth that the humors flow down from the Head, and would withal give us notice, that that flux cannot possibly be either without the Skul, or within it, and so from the Brain; he therefore determineth, that the fluxion is both from the Head, and from the Liver: but then in this he dissenteth from all others, that he teacheth us that the aforesaid fluxion (which he conceiveth to proceed from the Head) is very seldom under the Skin (as *Fernelius* tels us it is) and never by the hole of the Spinal Marrow (by which the Spirits are kept together) or by the hole of the Nook, above the external Membrane of the Spinal Marrow; but that by the Veins and Jugular Arteries (not only the external, but likewise the internal, by the which from the lower parts, especially the Liver, the humor is carried into the external and internal parts of the Head) it floweth back again into the great hollow Vein, and the great Artery, or its branches that have their existence under the Throat; and that so from thence they are devolved into the Joynts.

And the very truth is, that *Spigelius* his Opinion is indeed right, That the flux of humors in the *Arthritis* is by the Veins and Arteries; which he might wel learn even from this, by observing that if before the universal evacuation of the body there be applied unto the Foot, or the Hand, any external repelling or cooling Medicaments, that then the matter flowed back unto the noble parts, and excited acute Feavers, and other Maladies. But that the matter doth from the Brain first of al regurgitate into the Veins and Arteries, this he doth not at al prove, but produceth it without any firm ground and reason. For on the contrary rather, those things that happen unto Arthritick persons do testifie that this humor is neither generated in the Brain, nor heaped up there, nor thence regurgitates into the Veins and Arteries; since that if this should happen, a humor so sharp as this is, and able to effect so great pains, must needs excite the most grievous Affects in the Brain. *Spigelius* here seeks for shifts, seeing that many things teach us that these humors are bred in the Liver and Spleen, the places
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and store-houses of Sanguification, and that from thence they are heaped up in the Veins and Arteries, and by them at length thrust forth into the joynts; so that there is no need at all of deriving them from the Brain.

Some there are who determine that the humors are poured forth unto the joynts from the whole body. But these by the whole can here understand nothing else but the Veins and Arteries, dispersed throughout the whole body.

But that we may at the length conclude this long and tedious disputation, and contract it into a few words; this in the first place is certain, that the matter the cause of *Arthritis* is generated in the Bowels of the lower belly; yea, and that oftentimes it is long stabled up (as it were) about the Spleen the Intestines, and the Liver, until at the last it is transferred into the great hollow Vein. And *Mercatus* writeth most truly, that as he himself had seen when the pains of the joynts had arisen from the pains of the belly; so he likewise found the same to be the Opinion of Authors none of the meanest; and I my self have also observed it more than once in such persons as were Hypochondriacal, and such as have had the scurvy: and from hence likewise it is, that *Diarrhea* fluxes unseasonably suppressed are turned into the *Arthritis*. And that there may flow from the Colon Intestine a humor exciting the *Arthritis*, we are taught both by *Galen* and *Hippocrates* in 6. *Epidem. Com. 4. Text. 3.* And as for the waies and passages the thing is very plain (as we likewise told you before, touching the Scurvy:) to wit, that from the Colon this humor may by the Meseraick Arteries be transferred into the Trunk of the great Artery, and from hence be thrust unto the joynts.

And Secondly, This also is true and certain, (and that which is granted by all the most learned Physicians) that the Humor the cause of the *Arthritis* is moved through the Veins and Arteries (some of these say alwaies, but others of them very often, and they are those that determine that the humor floweth down likewise from the Head) and the thing is altogether so plain, that *Thomas Erasmus* (who notwithstanding in his 4. *Disputat.* against *Paracels.* Page 261. defendeth likewise another way from the Head) writeth, that he only can doubt of this thing who doth not sufficiently attend, and take notice of what is daily done, or he that hath his minde prepossessed with a prejudicate Opinion.

And seeing that these things are true and certain, the doubt now lieth in this, Whether this way be not sufficient? and whether there may any other be assigned? and whether the humors also flowing down from the Head, under the Skin, may excite the *Arthritis*, yea or no? And yet notwithstanding (in the third place) I conceive that this is also most true and certain, and sufficiently proved above, that sometimes the beginning of the fluxion is not from the Head. For whereas both the part transmitting, and the part receiving, do both of them discover themselves by their several and proper symptoms; and that in many Arthritic persons there appeareth no heaviness of the head, no pain, neither any other symptoms as signs and tokens of any humor gathered together and heaped up there; it cannot therefore be concluded that the humor floweth down from the Head. And moreover, neither hath that *Arthritis* which is from the Collick its original from the head, or from the brain, as before we shewed you: as likewise neither that which proceedeth from a *Diarrhea* unseasonably and unduly suppressed. And therefore fourthly, this remaineth that may truly be doubted of, to wit, Whether or no the *Arthritis* may sometimes have its original from a matter heaped up under the Skin of the Head, and from thence flowing down? Which indeed very many of the most learned and able Physicians do affirm, whom I leave free unto their own judgments: but yet for my own part I cannot be perswaded to believe it, for the reasons before alleadged; which here to repeat, I hold it altogether needless, in regard especially that I am able very well to render a reason of all those symptoms that befall unto Arthritic persons; although I determine that the humor the cause of *Arthritis* is moved only within the Vessels, and that by them it floweth into the joynts; especially if this be well heeded, that this humor doth sometimes most chiefly flow through the descending Trunk of the hollow Vein, and the great Artery, and sometimes likewise that it withal floweth by the ascending Trunk; and that from thence various symptoms are excited about the head. What need is there therefore that neglecting those waies which Nature hath ordained as Channels for the motion and flux of the humors, we should seek for unknown and unheard of waies? And there is one thing that I cannot but at least touch upon; and it is this, That *Erasmus* indeed (in the place alleadged) hath this for a sure and certain sign of the humor its flowing from the head, that the sick persons do for the most part manifestly feel and perceive the humor to flow down from the head, by the neck, sides, and back, like unto a water;

with a kind of shaking, trembling, or a slight kind of cold. But this sign seems not unto me any whit firm: for that shivering and quaking happeneth not only in the *Arthritis*, but oftentimes likewise in Feavers, the *Erysipelas*, small Pox, and Meazels; and it is a sign and token that these Diseases are very nigh at hand; when from the Trunk of the hollow Vein and Artery (especially in the back) by the branches that arise from them, and the extremities of the Veins and Arteries, a vapor from the vitious humor, or likewise the thinner part thereof is thrust forth into the parts of the back. For although that without doubt also the very same happeneth even in other parts, yet nevertheless this Chilness and trembling is first of all excited in the back, by reason of the Spinal Marrow, and the very many Nerves there proceeding from the said Spinal Marrow, and being endued with a most quick and exquisite sense; by the which Spinal Marrow a Chilness and shivering is likewise seen sometimes to ascend, and sometimes to descend: touching which see more in *Hippocrates* his fifth Section, and 69. Aphorism. And thus much may suffice as touching this Controversie.

Quest. 8. *Whether there may any thing be gathered together in the Joynts that may make any thing unto the producing of the fit.*

Not only *Paracelsus* and his followers (who derive the *Arthritis* from the ebullition of *Synovia*) have given me occasion to think of this Question; but likewise those strange and admirable Cures that have now and then been made in the *Arthritis* have chiefly put me upon the debate hereof. *Guilhelm. Fabricius* (in his first Century, Epist. 47. and 48.) relateth that some by tortures have been so freed from the *Arthritis* that they were never known afterward to undergo any fit thereof. Indeed by affrightment, as also by joy, it is a thing very well known that many have been freed from the Arthritick Paroxysms. But how a man should in this manner perpetually be freed from the *Arthritis* or joynt-Gout, it is not so easie a thing to render the reason thereof, unless it be sought for in the place affected. And there are likewise other Histories of this very thing. That famous and eminent person, Dn. D. *Doringius* related unto me, that there was a Citizen of *Giessa*, who (through impatience by reason of his pain) with a hatchet cut off the great Toes of both his Feet; and ever after this he lived altogether free from the *Arthritis*. *Andreas Libavius* likewise (in his 73. Epist. to *Schinzerus*) relateth such a story as this. There was (saith he) a Patient, an Host, or publick Inholder: A certain Physitian (a Chevalier, a person of great quality) happening to be there, having agreed with him for three hundred Florens, promised the Cure; and when he had received a Writing under his hand for the said Sum he sets upon it. The Patient is commanded to put his feet upon a Wooden Trunk. There were present the servants of this Noble Knight (able and strong men) that were commanded to hold him down in a sitting posture. The Knight himself being provided of an Iron Mallet, with six Nails fastened his feet unto this Trunk of Wood; and immediately with all the speed that he could, leaving his Patient crying out in a most miserable manner, taketh his Horse, and away he rideth. But in the mean time he oftentimes privately maketh enquiry whether the Disease had ever after returned. And having understood (after the space of three yeers) that the Patient had never again been troubled with the aforesaid Disease, he returneth back unto the Inn; and there making himself merry with his Host, he came fully to know that the Disease was cured. And thereupon he pulls forth the Writing that he had under the Hand and Seal of his Host, and demandeth the Money that was promised him, having made it appear that he was the Physitian that had wrought the Cure. His Host (although he had been most cruelly handled by him) consenteth to satisfie him; and accordingly he fed him and his Followers so long, until they had eaten and drunk out the three hundred Florens.

From all which Histories it seems that we may collect thus much; That in the place affected there lieth hid some kind of Mine, which in its own time maketh much for the exciting of the Paroxysm. But although it be very hard to determine any thing of a certainty as touching this thing; yet notwithstanding I wil acquaint you with my own thoughts (at least in the way of a Paradox) unto which I desire not strictly to engage any man to give his consent, but shal leave every one unto his own Judgment and Opinion.

Quest. 8. *Whether there may thing be gathered together in the Joynts, &c.* 81

All the parts of the Body, as they are nourished by an Aliment fit and convenient for them; so likewise in sick and Crazy Bodies, the Humors that bear a certain Analogy with them are carried up and down unto the other parts; whereupon there happeneth a vitious and corrupt Nutrition. In those that are found that which is unuseful for the nourishment of the other parts is (in men) wasted and consumed in the Nails and Haires; and in Brutes also it is converted into the matter of their Hoofs and Horns. In such as are unsound and sick, the vitious Humors are also carried unto the parts appointed for them; which as it happeneth in other Diseases, so we may see it more especially in the *Plica Polonica*; in which that vitious Humor is not only driven forth unto the haires of the head, which it clammeth and as it were gleweth fast together, but likewise unto the Nails of the Feet, which are thereupon made hard and black. In the Fractures of the bones the stone *Osteocolla* being taken tendeth unto the bones; and passeth into a *Callus*, (and this sometimes overgreat) as *Guilbelmus Fabricius* makes it appear unto us by examples, in his *first Cent. Observat.* 90. and 91.) if therefore Humors fit for the generating of the *Arthritis* be mingled with the blood; it is very probable that they are carried unto the Joynts, and that with the Aliment of the bones they insinuate themselves into the very substance of them; and that there the Excrement proper unto the bones is collected, as a Mineral and Rudiment of the *Arthritis* that is to follow. And *Galen* seemeth to teach us this very manifestly, whiles in the 39. *Aphorism.* of the 5. *Section*, he telleth us that each part of the Body as it hath its Nutriment, so it hath likewise its Excrement; and that there is a superfluous Humor left behind, like unto the Nature of the part where it remaineth. And indeed it is a thing very likely and agreeable unto the truth, that there should be such a Tartarous excrement collected, especially in the appendances of the bones, which are more porous then the Rest of the parts of the bones; and therefore (as *Andreas Laurentius* hath it in his *Second B. and 4. Chap.*) they are so framed, that they may be as it were the bellies of the Bones, in the which the Aliment of the bones may be concocted; which by degrees may be streyned through into their Caverns. If therefore any such humor, or Excrement, shall be collected in the bones, the like humor flowing thereunto, it boyleth as it were with heat; which being done, it is diffused into the parts lying nearest; and there it exciteh a pain in them: and this is especially done in the *Epiphyse* or additions of the bones, out of which the Ligaments arise, and by which the sensible parts about the Joynts are knit together. But if the said Humor or Excrement, be dissipated, or poured out in any other manner, it is credible that the sick person is then altogether freed from the *Arthritis*. Whereupon also it is not without good cause that such Medicaments as consume the humors about the Joynts (and wholly dry them up) are here greatly commended. And this might likewise have been brought for the confirmation of this Opinion, that such as are Arthritick are prognosticators of the weather (as they speak) and they perceive in their Feet change of Air, and Alteration in the weather; and as the common people use to say, they have an Almanack in their Feet. Which indeed *Johannes Anglicus* (in his *Rosa Anglica*) thinketh to happen, because that Air may enter into the Joynts the more freely by Reason of their Vacuity and Dilatation. But this Reason is of no moment, in regard that the pain is not in the Cavities of the Joynts; and because likewise that other parts have greater Cavities, which yet feel no such thing: but without doubt, this pain doth therefore arise, because that the neer approaching Changes of the Air do forcibly stir up and move the Excrementitious humors sticking in the Joynts.

And if any one would interpret the Opinion of *Paracelsus* and his followers in the best sence, he may even here have a good ground for his so doing. For *Paracelsus*, and *Petrus Severinus*, teach us that the *Arthritis* is generated from the extraordinary heat and Ebullition of the *Synovia*; where if by *Synovia* they understand a Humor not Natural, but something that is Excrementitious collected in the Joynts, they then teach us the very same that hath hitherto been spoken of. But *Quercetan* in his *Consil. of the Gout in the Joynts*, and the Stone, doth explain the same far more cleerly; where he determineth, that the Tartar that is heaped up together, and contained in the Joynts is the highest and most immediate Cause of the *Arthritis*; and that it is sometimes contained in the Joynts, and there remaineth idle: but so soon as there is any new fluxion, (which forcibly moveth it) it then exciteh a Paroxysm;

roxyfm; no otherwise, then as it is when Water is poured upon burning Lime, there is then a certain Ebullition, and heat.

Question, 9. *Whether Boies, Eunuchs, Virgins, and Women may be troubled with the Gout.*

Hippocrates indeed writeth (in the Sixth Sect. of his Aphor. Aph. 28) *Eunuchs are never troubled with the Gout, neither do they ever become bald.* And in the same Sect. Aphor. 29. *A Woman (saith he) is not at all troubled with the Gout, unless her monthly Courses fail her.* And ibid. Aphor. 30. *Boies are not affected with the Gout; before the use of Venus.* But Galen in his Comment upon the 28. Aph. writeth the very truth in this manner. *It was true indeed (saith he) that in the time of Hippocrates Eunuchs were not at all troubled with the Gout; but it is not now found to be a truth, as well in regard of the idleness, as the intemperancy of their lives.* For in the time of Hippocrates there were very few of any condition that were affected with this Disease, by Reason of their temperate lives, and their Extraordinary Moderation. But in this our Age, (wherein there hath been so great an augmentation of delights, Luxury, and pleasures, that there cannot well be any further addition unto them) there is an infinite multitude of such as are troubled with the Gout; some never so much as exercising themselves, but ill digesting and concocting their food, and continually distemperring themselves with all sorts of drink, without taking any Meat at all before their drinking of strong wines; and overmuch addicted to venery; and others of them (if they offend not in all and every of these particulars, yet) in some one or other of these excesses taking too great a liberty. And in the 29. Aphor. touching Women, he writeth: *This was formerly a truth (saith he) that Women (before their monthly Courses failed them) were not at all so much as attempted by the Gout, by Reason of those few Errors and excesses they were guilty of in the former Age.* But now adays by Reason of those many Exorbitancies wherein they offend, there are some of these Women afflicted with the Gout. And Seneca (in his 95. Epist.) writeth notably to this purpose. *Women (saith he) taking the like liberty and licence with men, and equalling them therein, have thereby also made themselves equal unto men in their sufferings, and Diseases of their Bodies.* For they come not a whit behind men in their night watchings, they drink as much as men; and they even provoke men to excess in Oyls and strong Wines; they equal men in casting up at the mouth whatsoever they had cramb'd into their surfett'd Bowels; and all the Wine they drink is by vomiting returned back again in full measure: and they equally with men take delight in qualifying the boiling heat of their inflamed Stomacks by melting of Snow in their Mouths; neither come they short of men in their wantonness and lusts, as being born to suffer. And therefore what wonder is it that the best of Physitians hath been found in a lie, in regard that there are so many Women troubled with the Gout? They have by their vitious lives lost the benefit of their sex; and having put off Womanhood, they have condemned themselves unto mens Diseases. Thus Seneca. Unto which even this also may be added, that the Gout which at this day is so frequent and common, is from the Grand Parents and Parents derived upon the Children and Nephews of both Sexes. And many such examples there are every where extant, that much derogate from the truth of what Hippocrates saith in his Aphorisms. I knew a youth (a Noble mans Son of Silesia) who not many years since coming hither to study, before he was eighteen years of Age, (although I verily believe him to be altogether free from Venery) he was oftentimes afflicted with fits of the Gout. Antonius Musa (upon the 31. Aphor. of the Sixth B.) writeth that he had seen one Alphonsus Daffonius (a Noble youth and one of great note) not above fifteen yeers old, and yet troubled with the Gout; who denied that he had ever exercised himself in the School of Venus. And Hollerius (upon the same Aphor.) writeth that he had seen a Boy (not above ten years old) much troubled with the Gout. And Michael Paschalius (in his first B. of the Meth. of Curing Diseases, Chap. 15.) tells us that he had seen a Noble youth (not above seven or eight years of Age) troubled not only with the Gout in his Feet, but with the Arthritis also, or the Gout running up and down in all the Joynts of his Body; and yet notwithstanding this Disease in his Joynts was not at all hereditary, his Parents and Grand Parents having never been afflicted therewith. Antonius Musa Brassavolus (upon the 28. Aphor. of the sixth B. of Hippocrates) relateth, that he saw at Venice an Eunuch (almost forty years of Age) a Turk,

a Turk, who was extreemly tortured with the pains of his Joynts. And the writer of the *Scholia* upon the 63. Chap. of the first B. of *Hollerius*, (touching internal Diseases) tell us that he saw the same. And there is no need at all, neither is it worth while to relate any examples of Women troubled with the Gout, since that they are every where so obvious, and apparent before our Eyes.

Question, 10. *Whether the Arthritis be Curable.*

IT is the common and received Opinion of many, that the *Arthritis* is altogether incurable. And the very truth is, there have been many found thus affected, whom the aforesaid Disease hath attended all their life long, and even unto their dying day. Whereupon it likewise happeneth that many of these Arthritick persons (conceiving their Disease to be desperate) will not at all seek unto the Physitian for his advice; and for the same reason also they refuse to abstain from any Errors in Diet. But on the contrary, there are many examples to be found of such as either by the assistance of Physitians, or by a good Diet, or by some sudden and unexpected chance and accident have been freed from the Gout, and have ever after lived altogether free from the same. *Porphyry* (in the life of *Plotinus*) writeth, that *Rogatianus*, a Senatour of Rome, a Platonist, and Scholar of *Plotinus*, by his frugal and sparing Dyet attained so much benefit in this affect, that when as before he was very violently handled and vexed with the Gout, so that he could not so much as go one step forward, but was fain to be carryed in his Chair, he hereby reassumed his strength again; and whereas before he was not able to stretch forth his hands, he by this his frugality and temperance became so wel recovered, that he had now more command of his hands, and could upon all occasions use them more expiditely then such as did their dayly drudgery with them. And so likewise above (out of *Trincavel* his 12. B. and 2. Chap. Touching the manner of curing the affects of all the parts of Mans Body) we related a story of a certain Physitian (an old man) at Venice, who by his abstaining from wine by the space of five years was delivered from the *Arthritis* or Gout during his whole life, even unto the very day of his Death. And we likewise related unto you before (out of *Franciscus Alexander*) of one *Francis Pecchius* (a man much troubled with the Gout) who being cast into prison, and there detained for twenty years, was in the end freed both from his imprisonment and all his Arthritick pains, and so continued free from all fits of the Gout for ever after during his Natural life: And *Marcus Gattinaria* (in that Chap. of his Book, touching the Cure of the pains of the Joynts from a hot Cause) writeth as concerning himself; that when he first began to suffer the fits of the Gout, this was the Course he took for the recovery of his health, and ease from his fits: to wit, first of all, he imposed upon himself an abstinence from Wine for two years, and every month he emptied his Body by Evacuations, and then he took some Pill or other for the diverting of the Humor, (the cause of his distemper) and this he made use of twice in the week; that so Nature might be diverted in her transmitting the matter unto the Joynts, and that so she might rather evacuate it by the way of siege: and by using this course for a while he was so thoroughly Cured, that he was never after that troubled with any such like pains. And *Carolus Piso* also (in his Book of Diseases from Serous or Whyeish impurities, in his Consil. touching the *Arthritis*) writeth, that a certain man who had lived all the time of his youth infested with perpetual pains of the *Arthritis*, and making his moan and continual complaints thereof; by the counsel and advice of *Nicolaus Piso*, in the flower of his Age, he wholly denyeth unto himself the use of Wine, although he were the principal of those that were set over and had the charge of a Wine-Cellar (a rare example indeed of admirable temperance) and so by thus doing he kept himself for thirty years together (all the time of his life after) altogether free from those pains. And Histories likewise testifie, that some even by a due and orderly regulating of their lives, and others again by their being reduced unto poverty, and so necessitated unto a frugality in point of Dyet, have thereby been wholly freed and delivered from the Gout. And this withal is a thing most strange and wonderful (of which *Guilhelm. Fabricius* relateth three examples, in his First Cent. and 79. Observat.) that some certain Arthritick persons there have been, who upon suspicion of some Notorious Offences by them committed,

committed, have been oftentimes set upon the wrack, and put upon the extreamest of all exquisite Tortures; but when they have constantly maintained their own innocency, they have at once been absolved and for ever set free from their Crimes, and withal from the fits of the Gout, with the which they had formerly been most grievously afflicted. And wonderful also is that example which the same Author (in his first Cent. Epist. 47.) relateth of a certain envious and malecontented Person that lay sick of the Gout; who though he were fastened unto his sick Bed by his painful Disease, could not yet refrain from traducing and speaking ill of others. Which when a merry conceited Fellow there present perceived (who had also himself been last by the petulancy of the others Tongue) about the dusk of the Evening (taking his opportunity when the sick Person was left all alone by all his Family) enters the sick mans House privily in a strange disguise that he had gotten, like unto an *Aethiopian* or *Blackmoor*, and thus disguised he goeth neer unto the Bed-side of the sick Person; who astonished with the unusualness of the form, his own solitariness, and withall terrified with the darkness of the place it self that he lay in, demandeth of him who he was, and from whence he came. The Whiffler answering to none of his Questions, but making his approach closer unto the Bed-side catcheth him by the Arms (which were likewise much troubled and pained with the *Arthritis*) and having thus laid hold on him he throweth him upon his back, and so hanging upon the same and crying out with all the noise he could make, he carrieth him out of the Chamber where he lay, ever and anon crushing his Feet against the Stairs by which he was to go down. When he was come into the Yard, he there sets down his burden, putting the sick Person upon his Feet, speaking not a word to him all this while, only staring him full in the Face. And then suddenly again he runs towards him and made as though he would once more have seized upon him, and so he carried him out of the House. But now he who before could not so much as set his Feet to the Ground, by reason of his Disease, nor walk at all upon plain Ground, much less get up any whither by the Steps, now runs as fast as he could up Stairs, and to the top of them he gets, and so into his Bed-Chamber he comes, and thorow the Window with the loud noise he made all the Neighborhood was raised, and so come running in unto him to see what the matter was. He out of Breath as he was, and half dead with affrightment, tels them that he was by a Ghost dragg'd out of the Bed where he lay, and then being carried forth of his Lodging-room he was most miserably handled; and that had he not often called upon and ingeminated the name *Jesus* he had without doubt been gone, had there been no more men in the world: And wonderful indeed it was, that he who was before so sorely afflicted with the Gout should hereupon recover his health and strength, and never after be troubled with any the least fit of his former Disease. *Fabricius* hath there likewise another History of a certain Malefactor that had the Gout, who being brought forth and led unto Execution (his punishment being to have his Head cut off) by that time he was come half way to the place of execution there was brought him an unexpected Pardon granted him by the Clemency of his Gracious Prince. The miserable man was so affected with this good tidings, that he who till now wanted the use of almost all his extream Members, now on a suddain cast himself on his Feet with a quick and speedy motion, and lived after this for many yeers wholly free from all kind of pain and trouble that formerly he had undergone by reason of the Gout. And I my self remember likewise that we had here with us not long since a Noble Youth, much troubled with the Gout; this Youth, the neer neighboring houses happening one Night to be all on Fire, and the House wherein he was in danger to be burnt, he suddenly for fear gets him out of his Bed, and down a Ladder he runs; and intending to fly into another House, he fell (with that Foot where his grief lay) into a pit which the Winters Ice had made, it being now full of Water; and so by this means was freed not only from the present fit, but likewise from all other pains of the Gout for the future; and so he lived many yeers after. Neither have we only examples of those who either by an exact and accurate Diet, or by affrightment, or Joy, and the like means, have been delivered from the Gout; but we have examples of them likewise who have been recovered by the help of Medicaments. *Cardanus* (in his B. of admirable Cures, Numb. 16.) relateth four examples of such as he himself had recovered of the Gout. And we have likewise other examples mentioned; of which we find certain of them in *Schenkius* his fifth Book of Observat. And *Solenander* also (in his 5. Sect. Consil. 1.) writeth in this manner: *As we have* (saith he) *known many that have been cured by others, so we have also our selves set many free from the Gout for divers yeers together; and this we have done by curing them without any great ado, who before every half yeer (and sometimes oftner) were greatly afflicted with the Gout: of whom some are yet alive to testifie the truth of what I say.* And very remarkable is that which

which *Carolus Piso* (in the place alleadged) relateth in this manner: One *Cornelius Petrus Picardus* (a man well skilled in Rhetorick) was subject unto the Gout, from the seventh year of his age, and so forwards, the Arthritis returning oftentimes every year, and much hindering him in the prosecution of his studies. This Patient advising with *Carolus Piso*, and beseeching him to afford what ease he could unto his intollerable pain, had so comfortable an answer from him, that it much cheered the yong man: for he promised him his desire, if he would but only yield obedience unto these few Precepts of his; to wit, If he would indeed by degrees with-hold from himself a third part at the least of his dayly allowance, and more especially in that of his Drink; and in the first and chief place, if he would altogether abstain from Wine; and then in the next place, if he would alwaies as carefully and exactly keep himself from the injuries of the Air, and especially from the cold; and moreover also if in the night he would cover himself sufficiently with Bedcloaths, so that constantly every morning, about the end of his second sleep there might appear upon his body, if not a sweat, yet at least a moistness and dewiness as it were; and if (lastly) he would with the Syrup of white Roses (taken three or four times every month) purge out of his body all the serous or wheyish superfluties. The yong man yielded obedience unto these Precepts for two years and somewhat more; and by this means (beyond all mens expectations) he prevented and cut off all the matter and fuel of his Disease, and so lived altogether free from all pain whatsoever in his joynts.

And therefore certain it is from dayly experience, and the observations of Physicians, that many there have been troubled with the Arthritis, who have not been recovered and cured thereof; and on the contrary likewise that very many have been perfectly recovered of the said Disease. Now who they be that are Curable *Hippocrates* teacheth us, 2 *Proverb.* I am confident (saith he) and I speak it so far as I know, or ever yet heard of (touching those that are troubled with the Gout) that whosoever of them are either aged, or have Callous and hard knobs and knots growing about their joynts, or such of them as live careful and sorrowful lives, having their bellies hard and costive, that al and every of these are (for ought I know) altogether incurable by the art of man. Indeed the Dysentery (if it chance to happen upon it) is the best curer of those sick persons; and so indeed also are other scourings very beneficial and profitable in this case, if they reach unto the lower parts. But as for such as are yong, and have no hard knots as yet growing about their Joynts; if they live accurately and carefully in point of Dyet, if they be such as love to stir by laboring and exercising themselves, and such as have a good mind to obey the Prescripts of Physicians (every one as he is able, according to his severall employment and study) these without doubt (if they advise with an understanding and expert Physician, may be perfectly cured. Thus *Hippocrates*. Yet nevertheless we may very rightly and deservedly account the hereditary Arthritis among those Gouts that are altogether incurable. For as al other Diseases that are Hereditary, so likewise the Hereditary Arthritis is not to be removed and overcome without much difficulty, if ever it be done.

Now there are many Reasons to be given, why divers of those that are of themselves curable, are yet never cured. For first of all, the cause is oftentimes in the Physician, who is not sufficiently expert in the Nature of this Disease, and the cause thereof. For when as there are so many Physicians that think amiss of the Nature of this Disease, and cherish in themselves false and erroneous Opinions touching the same; it is indeed no wonder, that these do not rightly cure it, since that of a Disease unknown (and the nature and cause thereof not understood) there can be no right and methodical Cure expected. And there are many Physicians likewise that with Leaden Weapons (as I may so say) fight against an Enemy so powerful and obstinate. And then again secondly, the cause may be in the sick persons themselves; who usually offend in three things. For most of them are perswaded that this their Malady is incurable; and therefore they never trouble their heads with thoughts of Physician or Physick, neither wil they advise with the skillful Artist, but suffer the Disease (that at first might have been cured) to take such deep root that it is now become altogether incurable. And secondly, As for such of them who do consult the Physician, they likewise offend in three things; the first whereof is this, That for such as are indeed able and expert, they for the most part sleight these, and give credit unto Empericks, consulting with every Mountebank they meet withal; by whose campering with them the Disease is made the worse, and the harder to cure. And secondly, they wil not continue the use of the Medicaments long enough. For that that vicious disposition in the body (which maketh very much for the augmenting and confirming of the Disease) as also that the vicious humors themselves may be taken away (after they have by degrees been collected and heaped up together) it

is not sufficient that the sick person be purged once or twice every yeer; but it will be very needful to continue the use of the Medicaments according to the Physicians prescript; and therefore we find the Ancients giving their Arthritick Pouders for a whole yeer together. And thirdly, another thing wherein they offend is this, That most of those that are Arthritick desire only the mitigation and asswagement of their present pain; and so that they may but be freed from the Paroxysm they lie under, they think that the worst is now past; never so much as troubling themselves in advising, how and by what means they may prevent the like fits for the future. And lastly, this is also a chief and almost the principal cause of *Arthritis* its being so seldom cured, That there are but very few who will be perswaded to keep an exquisite and accurate Dyet; and they will chuse rather to endure the Arthritick pains, unto which they have been so long accustomed and inured, than submit themselves unto the Laws and Rules of a more strict and severe course of Dyet. And very few there are of them that will deny themselves the use of Wine, the drinking of which unless it be omitted, there is in very many Patients no hope at all of a perfect cure. And from hence it happeneth, that there are more of the Rich, and persons of Quality that are troubled with the Gout, than there are of the poorer sort of people, and Peasants; in regard that these last keep a very spare dyet, and drink no Wine at all; whereas those former guzzle in Wine too freely; and in many other points of Dyet offend far more than the poor. Neither yet notwithstanding is this at all to be denied, That there are some, who although they do not commit any notorious errors in the course of their Dyet, yet they can hardly be freed from the Gout, because that the greatest part of their Aliment (by reason of the weakness of their bowels) is converted into vitious humors, like as we see that there are in others also vitious humors elsewhere collected. And therefore in regard that it is oftentimes impossible to correct that weakness of the bowels, the *Arthritis* likewise from thence proceeding will scarcely ever be cured.

Quest. 11. Whether it be fit to purge in the beginning of the Arthritick Paroxysm?

There are divers and different Opinions of Physicians as touching this point. For some there are who affirm that in the very first beginning of the Paroxysm purges are therefore to be administered, that so by them the Humors may be drawn back from the Joynts, and that so the pains may be lessened, and the fits made somewhat shorter. And they appeal likewise unto Experience; by which it appeareth that upon the administering of Purgations in the beginning of the Paroxysm the sick person hath been delivered from all the pain that attendeth the fit; like as before we told you of *Petrus Bayrus*, who writeth of himself, that he was so weak and impotent, that he could move no part about him but only his Tongue; and that he was carried and put upon his Close-stool by four men; but having taken his *Caryocostine* Electuary, and after that his belly had been thereby five times loosened, and made soluble, he found such ease from all his former pains, that now he could go and ease himself without any help at all, and so in like manner return from the Close-stool; and that he was able also the very same day to walk from one end of his study unto the other.

But others there are, that maintain the contrary Opinion; and these tell us, That if the humors be moved by a purging Medicament, they then rush unto the Joynts and the part affected more vehemently, and with greater force and violence, as also in greater abundance; and so they excite and cause the greater pains. And these also refer themselves unto Experience, by which it will be found, that by the use of Purging Medicaments the pains have not only been augmented, but that likewise if the Purges were ever a whit more hot, and stronger than ordinary, the humors were then inflamed by them, and drawn unto the internal and more noble parts, and there excited burning Feavers that were both dangerous and deadly.

Ludovicus Septalius (in the 7. B. of his *Animadversions*, Numb. 177.) writeth, That by forty five yeers Experience he had found that Purgations administered in the beginning of the *Arthritis* succeeded well in some, but that others again had no benefit at all by them; and therefore he giveth us this distinction; When there is (saith he) present in the *Arthritis* both a fluent matter, and a strength of the part expelling, as also a weakness of the recipient or part receiving; If the abundance of matter, or the strength of the part expelling shall appear to be prevalent, then (without any further controversie) that matter is with all speed to be evacuated, and called away from the Joynts, either by a Vomit, or else by some purging Medicament. But if the looseness and weakness of the Joynts be the cause of the fluxion, so that upon every light occasion, and whatsoever the quantity of the matter be, Nature be still attempting to thrust forth the said matter (so soon as it is collected in the body) unto the Joynts, then (as he tells us) upon the taking of a purge, as the fluxion is thereby augmented,

mented, so Nature is likewise thereby rendered more weak and infirm.

But in very truth, this is a thing indeed most certain, That the matter doth rush unto this or that part with sometimes a greater, and sometimes a less violence and impetuosity: but as for the cause of this fluxion, it is never the alone weakness of the Joynts (which only disposeth the part for the more easie receiving of the matter, but never draweth or allureth the humor unto the part affected) but that it sometimes rusheth more easily unto this, and sometimes unto that part, this is rather to be ascribed unto the Expulsive faculty, which is accustomed now unto this, and as soon again unto that way and part, for the expelling forth of the peccant humor. And therefore if there be any Fear of the matters sudden and violent rushing upon the part, purgation is not thereupon presently to be omitted; but rather such a purge is to be administered that may not only move the humors, but that is able also wholly to evacuate them. But yet nevertheless, it is here the safest course (as *Septalius* perswadeth us) to consult Experience. For if we find that the pains are the more exasperated upon the giving of a Purge once or twice, and that thereupon they continue the longer, we must then forbear to purge for the future. But on the contrary, if we find the pains to be hereby diminished, and the Paroxysm made more easie and light, we may then also even with boldness and confidence go on to purge, as there shall be occasion. But it is most fit and convenient to purge, even at first, in the very beginning of the Disease. For whenas the impetuous motion of the humor unto the part affected is not as yet altogether so great, the humor may easily be drawn another way; whereas if it already with great violence rush unto the part affected, it is the harder to be recalled. But lest that otherwise some Feaver should be kindled, the condition of the humors, and the nature of the purges, are wel to be weighed and considered; and they are so to be tempered, that no such thing may happen.

Quest. 12. *Whether Baths be good and useful for such as are troubled with the Gout?*

BAths are by many Physicians commended unto Arthritic persons; and many also thus affected betake themselves unto these Baths, as unto the only sacred Anchor of their Hopes, and a most sure Refuge, as from whence they expect an easing of all their pains and tortures. But yet on the contrary, Experience hath often taught us, that some even in those very baths have fallen into the fits and pains of the Gout; and that others likewise by the use of the said Baths have become much the worse. And therefore seeing that there is a Truth in both these Assertions; to wit, That Baths are sometimes useful and good for Arthritic persons, and now and then likewise very hurtful for them; we must first of all know that from Baths alone there was never yet any that ever recovered (or could so much as probably hope for) his perfect health and strength. Neither also doth the *Arthritis* (as we shewed you before) proceed only from the weakness of the joynts; neither is it sufficient to strengthen the joynts, that the sick person may be cured of the Gout. And moreover, that the Baths do sometimes help, and sometimes hurt the person thus affected, this is not to be ascribed meerly and simply unto the Baths, but unto the constitution of the sick person, and likewise the course of Dyer by him observed whilst he made use of those Baths. For if the Body shall be first rightly evacuated, so that there are only the reliques and remainders to be consumed, and that the Joynts be to be strengthened, Baths may then be allowed as very fit and profitable for the sick person. For they do more powerfully dissolve and dissipate the remainders of the Humors in the joynts than do any Medicaments whatsoever, and so strengthen the parts; and wicah (if the use of them be temperate) they cherish and preserve the Native heat of the Body. But if the Body be still impure, and as yet full of vitious humors, the Baths melt and pour all abroad these vitious humors; whereupon the sick persons sometimes fall into their fits in the very Baths, and so are forced to desist from any further use of them; or else these humors being scattered and poured abroad are carried into the other parts, and unto the bowels; and there they cause many dangers and mischiefs. And so we may even very truly conclude, that Baths are more hurtful than helpful unto persons in this condition, unless they observe a right and due course of dyer, while they make use of them.

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